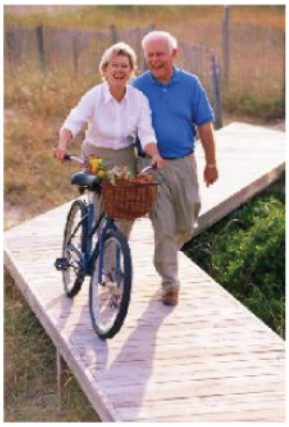

Steps to a HealthierUS

Core Performance Measures:

A Systematic Approach to Process and Outcome Evaluation across the Steps to a HealthierUS Cooperative Agreement Program

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
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Core Performance Measures:
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INTRODUCTION

Why invest in community programs to prevent chronic disease and promote health?

In the United States, during the last century, the diseases that cause the most death, illness, and disability changed dramatically from infectious diseases to chronic diseases. Today, chronic diseases are among the most prevalent and costly of all health problems, with prolonged illness and disability resulting in decreased quality of life for millions of people nationwide. Among chronic diseases, obesity, diabetes, and asthma are three of the most significant contributors to morbidity and mortality in the United States.

To further reduce the burden of these diseases and risk factors, the Department of Health and Human Services (HHS) established the Steps to a HealthierUS Cooperative Agreement Program (Steps Program). The Centers for Disease Control and Prevention (CDC) coordinates day-to-day management and implementation of the Steps Program. CDC staff provide technical expertise to support program planning and implementation, disease and risk factor surveillance, and program evaluation. For example, CDC helps Steps communities meet fiduciary responsibilities established by the federal government, and coordinates national-level evaluation activities, including program-wide performance measurement. The Steps Program extends the reach of other chronic disease prevention and health promotion activities and advances the Agency's vision of healthy people in a healthy world through prevention.

To illustrate the effect of chronic diseases on public health, Table 1 shows estimates of morbidity, mortality, and cost associated with chronic diseases in general; obesity, diabetes, and asthma, in particular, and the primary risk factors for these diseases.

Table 1. Estimates of Morbidity, Mortality, and Cost Associated with All Chronic Diseases, Obesity Diabetes, Asthma, and Related Risk Factors for these Diseases.

Condition or Risk Factor	Burden: Morbidity, Mortality, or Cost
All chronic diseases	▪ More than 90 million Americans live with a chronic illness.[1] ▪ 7 of every 10 Americans who die each year, or more than 1.7 million people, die of a chronic disease.[2] ▪ Chronic disabling conditions cause major limitations in activity for more than 1 of every 10 Americans.[2] ▪ Chronic diseases account for more than 70% of the $1 trillion spent on health care each year in the United States.[2]
Obesity	▪ Obesity was associated with an estimated 111,909 deaths in 2000.[3] ▪ The direct and indirect costs of obesity in the United States are about $118 billion a year.[4]
Diabetes	▪ Diabetes affects more than 20 million Americans and contributed to more than 224,000 deaths in 2002.[5] ▪ The direct and indirect costs of diabetes are about $132 billion a year.[2]
Asthma	▪ In 2003, 29.8 million people in the United States had received a diagnosis of asthma at least once in their lives.[6] ▪ Asthma accounted for 13.9 million outpatient visits, 1.9 million emergency department visits, and 484,000 hospitalizations in 2002.[6] ▪ In 2004, the direct and indirect costs attributed to asthma totaled $16.1 billion.[6]
Physical inactivity	▪ Increasing physical activity by people who are currently inactive could save $76.6 billion a year in direct medical costs.[7]
Tobacco use	▪ In the United States, smoking causes about 440,000 premature deaths each year.[8] ▪ The estimated direct medical costs associated with smoking exceed $75 billion annually.[8]

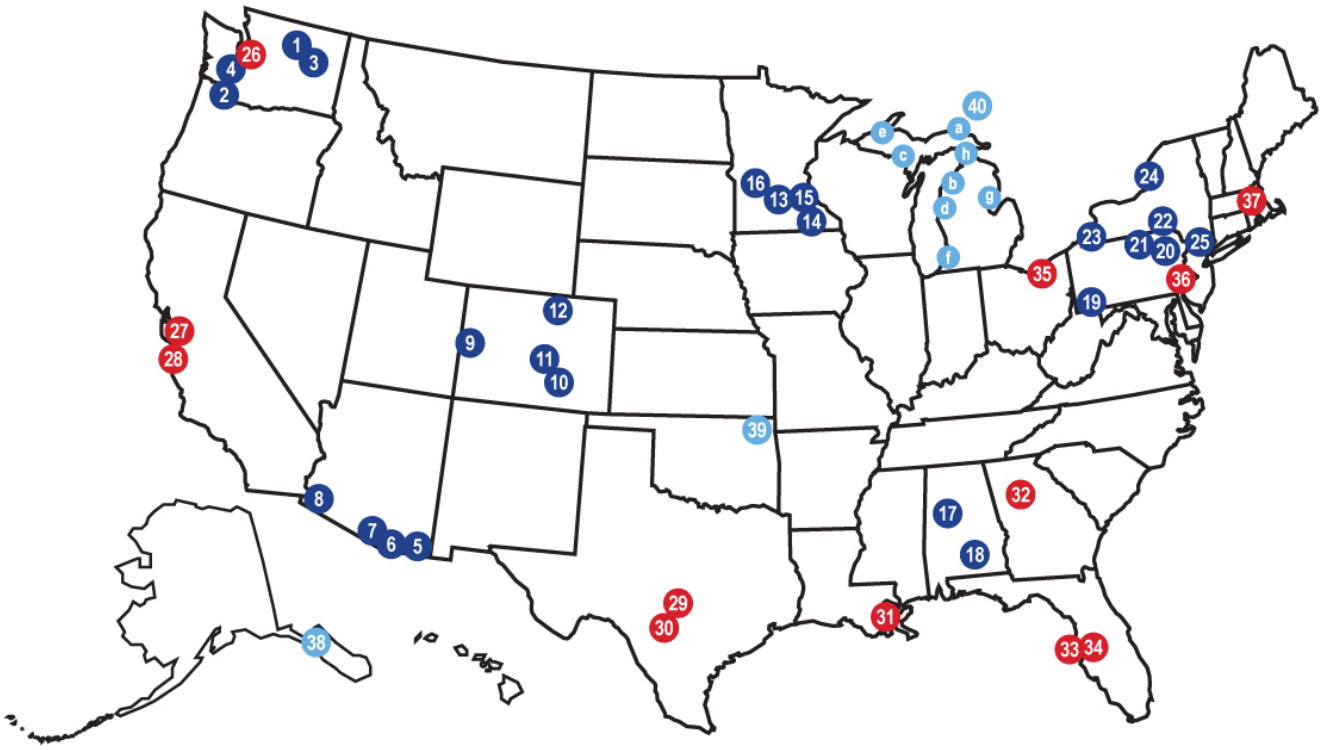
What is the Steps to a HealthierUS Cooperative Agreement Program?

The Steps Program addresses conditions of urgent importance to the public's health (obesity, diabetes, asthma) and three related risk factors (poor nutrition, physical inactivity, and tobacco use). Drawing upon recommendations from the Institute of Medicine,[9] this program focuses on joining the resources and perspectives of a wide range of sectors and entities relevant to public health practice. These groups work in concert to craft, implement and evaluate evidence-based prevention and health promotion efforts to create measurable improvements in health and well-being community-wide.

CDC funds communities; program funds totaled $13.6 million in 2003, $35.8 million in 2004, and $44 million in 2005 and 2006. As shown in Figure 1, the Steps Program includes activities in 40 communities nationwide. These programs fall into three categories:

- Small cities or rural areas whose activities are coordinated by a state health department. Each of these communities consists of two to four areas with a population of 10,000 to 400,000. The population of all communities coordinated by one state cannot exceed 800,000: 16 of these communities were funded in 2003 and 9 more in 2004. For these communities, the Steps Program funds the state department of health, and the department of health funds individual Steps communities.
- Large cities or urban areas (contiguous areas with a population of at least 400,000): 7 of these communities were funded in 2003 and 5 more in 2004.
- Tribes or tribal entities serving a population of at least 10,000: 1 community was funded in 2003 and 2 more in 2004.

Figure 1. Steps to a HealthierUS Cooperative Agreement Program Map of Communities by Categories of Eligibility, 2006



State-Coordinated Small Cities / Rural Communities

Washington
1. Chelan, Douglas & Okanogan Counties
2. Clark County
3. Colville Confederated Tribes
4. Thurston County

Arizona
5. Cochise County
6. Santa Cruz County
7. Tohono O'odham Tribe
8. Yuma County

Colorado
9. Mesa County
10. Pueblo County
11. Teller County
12. Weld County

Minnesota
13. Minneapolis
14. Rochester-Olmsted County
15. St. Paul-Ramsey County
16. Willmar

Alabama
17. River Region
18. Southeast Alabama

Pennsylvania
19. Fayette County
20. Luzerne County
21. Tioga County

New York
22. Broome County
23. Chautauqua County
24. Jefferson County
25. Rockland County

Large Cities / Urban Communities

26. Seattle-King County, WA
27. Santa Clara County, CA
28. Salinas-Monterey County, CA
29. Austin-Travis County, TX
30. San Antonio-Bexar County, TX
31. New Orleans, LA
32. DeKalb County, GA
33. St. Petersburg-Pinellas County, FL
34. Tampa-Hillsborough County, FL
35. Cleveland, OH
36. Philadelphia, PA
37. Boston, MA

Tribes / Tribal Entities

38. Southeast Alaska Regional Health Consortium, AK
39. Cherokee Nation Health Services Group, OK
40. Intertribal Council of Michigan, MI
    a. Bay Mills Indian Community
    b. Grand Traverse Bands of Ottawa & Chippewa Indians
    c. Hannahville Indian Community
    d. Huron Potawatomi Indian Community
    e. Keweenaw Bay Indian Community
    f. Little Traverse Bay Band of Odawa Indians
    g. Saginaw Chippewa Indian Tribe
    h. Saut Ste. Marie Tribe of Chippewa Indians

Steps Program Announcements 03135, 04234, and 04134 articulate the requirements of the program and establish key elements of the design and implementation of state and community-based activities.[10,11,12] All Steps communities implement evidence-based chronic disease prevention and health promotion activities to generate progress toward 12 general outcomes:

- Prevent diabetes among those with pre-diabetes.
- Increase identification of those with undiagnosed diabetes.
- Reduce complications of diabetes.
- Prevent overweight and obesity.
- Reduce complications of asthma.
- Improve nutrition.
- Increase physical activity.
- Prevent tobacco use and exposure to tobacco smoke.
- Increase the number of tobacco users who quit.
- Increase the use of appropriate health care services.
- Improve the quality of care for people with chronic diseases.
- Increase effective self-management of chronic diseases such as asthma and diabetes.

Steps Program Announcements 03135, 04234, and 04134 also define specific activities to address these intended outcomes. These activities include, but are not limited to, the following:

- Implement multiple evidence-based public health strategies to address all targeted diseases and related risk factors community-wide, including strategies to improve disease self-management skills and health care access and quality.
- Establish a lead agency with fiduciary responsibilities such as allocating, dispensing, and monitoring funds given to partners; contracting for services; linking budget to performance; optimizing resources via coordination with existing programs; expanding resources available by securing grants, additional public funding, or in-kind contributions; working to sustain key Steps Program activities and interventions.
- Build an alliance of key partners and coalitions to form a community-based consortium committed to participating in program planning, implementation, and evaluation.

- Establish and coordinate a formal leadership team to provide strategic direction and expertise throughout program planning, implementation, and evaluation.
- Provide ongoing program management (e.g., establish and maintain appropriate staffing; ensure that program objectives and activities are consistent with, supportive of, and not duplicative of, relevant state activities).
- Expand existing surveillance mechanisms to collect representative data via the Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Surveillance System (YRBSS).
- Collect data necessary to report on program-wide performance measures, and use surveillance and evaluation data to inform programmatic decision making.

We synthesize key elements of the program in a logic model (Figure 2). A logic model is a graphic presentation of the main elements of a program and its intended outcomes. Moreover, the logic model depicts the program's underlying theories and assumptions[13]. Specifically, the logic model includes program inputs, activities, immediate accomplishments (i.e., outputs), and the expected results of the program over time (i.e., outcomes). In this case, certain components of the logic model are presented in general terms because specific activities vary by community, in response to local needs. A well-designed logic model is founded on a clear understanding, or reasonably sound estimation, of how inputs and activities connect to the intended outcomes. However, there are challenges to capturing and conveying the underlying theory of this program in this format. The logic model must reflect the complexity of the Steps Program. For example, the program addresses multiple diseases and risk factors, and community-based activities that take place in various settings (e.g., schools, workplaces) and serve multiple populations (e.g., diverse racial and ethnic groups, children, adults). While there is much research on the effectiveness of categorical public health programs (e.g., efforts to promote physical activity or prevent initiation of smoking), there is far less documentation of programs that tackle multiple diseases and risk factors at the same time, or in a more integrated fashion. Several assumptions and theoretical constructs serve as the foundation for the logic model, and guide the organization of the specific components of the model.

Assumptions and Theoretical Constructs

Evidence Based Strategies

Steps communities implement evidence-based interventions drawn from the existing and emerging research base and careful scientific reviews such as the Guide to Community Preventive Services (http://www.thecommunityguide.org/), the Guide to Clinical Preventive Services (http://www.ahrq.gov/clinic/prevnew.htm), and Promising Practices in Chronic Disease Prevention and Control (http://www.cdc.gov/nccdphp/promising_practices/). Programming in Steps communities should be based on the best available evidence for chronic disease prevention and health promotion. As such, the logic model reflects the selection of activities with the greatest promise of results.

Socio-ecological Model

The ecological perspective emphasizes the interaction between, and interdependence of, factors within and across all levels of a health problem[14]. McLeroy et al identify five levels of influence for health-related behaviors and conditions[15]. These levels include: individual, interpersonal, organizational, community, and public policy. Recognizing the contributions of both individual and social environmental influences to the diseases and risk factors relevant to this program, Steps communities are encouraged to include interventions aimed at all levels of the socio-ecological model. In many cases, a single intervention might impact multiple levels of influence. For example, a community-wide walking program aims to increase individuals' knowledge and change attitudes by providing information on the benefits of regular physical activity (i.e., individual level). This same program could target social influences by establishing and supporting walking groups (i.e., interpersonal level). Finally, the walking program can address relevant community structures by providing free transportation to walking sites or promoting the use of malls or schools for this activity (i.e., community level). The logic model takes into account the thoughtful selection of programmatic activities across the five levels of influence discussed here, and the synergistic effects of these activities on the path to results.

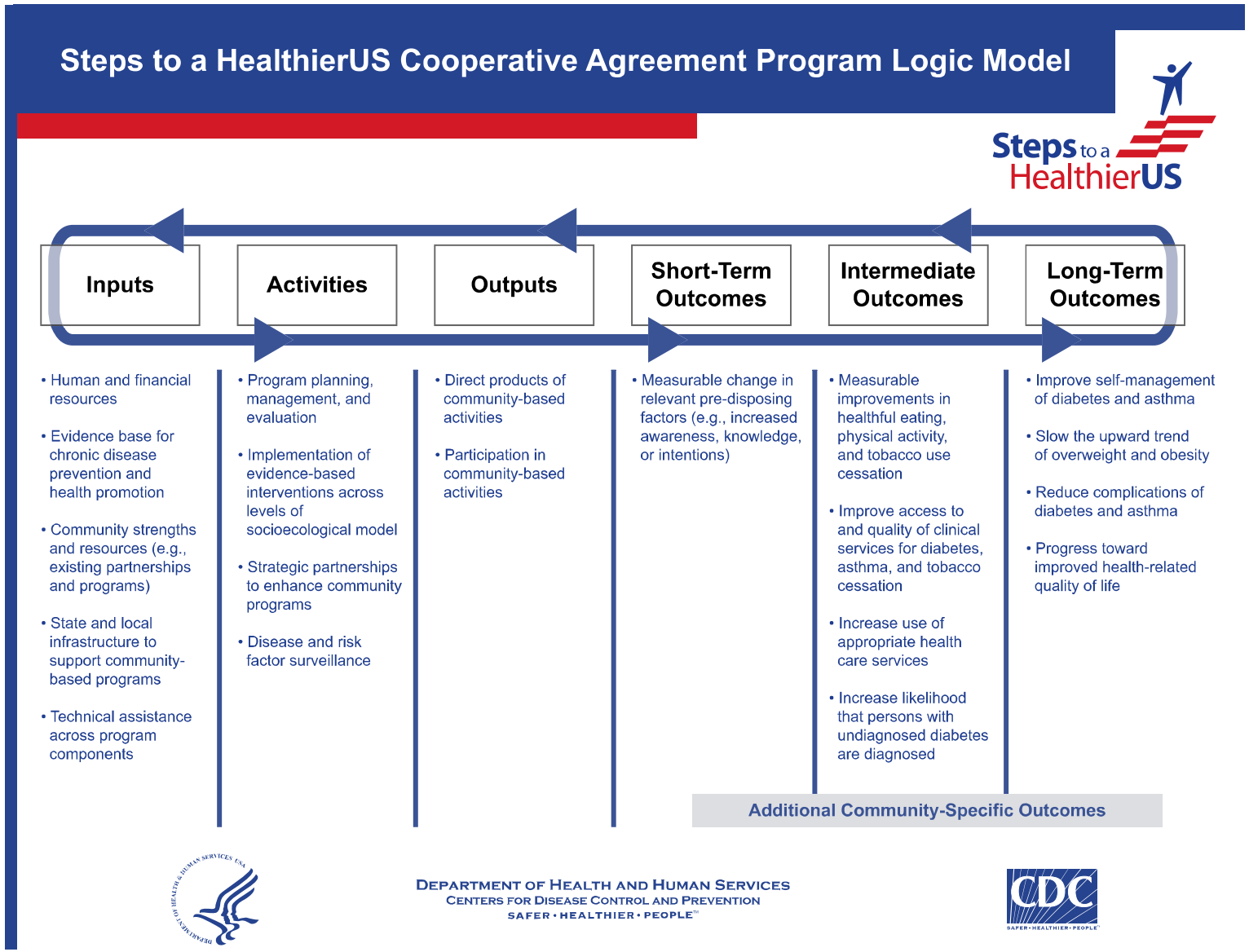
Integration of Chronic Disease Prevention and Health Promotion Efforts

Integration is a term commonly used in health and human service programs with limited consistency in definition. As noted by the Institute of Medicine, a recommendation for ensuring quality of services in public health is to "experiment with clustering or consolidation of categorical grants for the purpose of increasing local flexibility to address priority health concerns and enhance the efficient use of limited resources."[9] In short, a more integrated approach to improving the nation's health may result in improved operational effectiveness, enhanced sustainability in a climate of finite resources, and a system that attends to the complex inter-relationships between risk factors and health outcomes[16]. Given the diseases and risk factors addressed here, the logic model reflects efforts to better integrate or connect disease prevention and health promotion efforts in Steps communities. Thus, it is considered relevant to program implementation and progress toward the desired outcomes.

Disease and Risk Factor Surveillance

The Steps Program emphasizes the importance of community-based disease and risk factor surveillance. Thus, the logic model includes disease and risk factor surveillance among the key activities. These data, combined with information on program implementation, provide evidence for decision-making throughout the life of the program (e.g., identifying populations at risk for disease, documenting progress toward intended outcomes). As such, the logic model also suggests the use of data via a large, circular arrow across the column headers. This arrow represents a feedback loop, or pathway, whereby information about the program is put back into the system in the form of meaningful data. The inclusion of an explicit feedback loop emphasizes the use of data to facilitate program development or quality improvement, make shifts in the program to stabilize or improve operations, or identify points along the way where additional information is required.

Figure 2. Steps to a HealthierUS Cooperative Agreement Program Logic Model for Program and Evaluation Planning



Components of the Logic Model

Inputs are the people, money, and information used to establish and implement a program.[17] The logic model shows the Steps Program's primary inputs: human and financial resources, the evidence base for chronic disease prevention and health promotion, community strengths and resources, state and local infrastructure to support community-based programs, and technical assistance across program components. Program staff use the inputs to implement *activities*. Steps Program activities span four broad categories: 1) program planning, management, and evaluation; 2) implementation of evidence-based interventions across the socio-ecological model; 3) strategic partnerships to enhance community programs; and 4) disease and risk factor surveillance. *Outputs* are the direct products of program activities (e.g., a physical activity class held for elderly people).[17] Steps Program outputs include completed community-based activities and participation in those activities; specific products vary across Steps communities.

Program *Outcomes* are the expected results of our investments in chronic disease prevention and health promotion (e.g., local smoking laws or school curriculums).[17] The logic model includes *short-term, intermediate,* and *long-term outcomes.*

- Short-term outcomes include measurable change in relevant pre-disposing factors (e.g., increased awareness, knowledge, or intentions).
- Intermediate outcomes include measurable improvements in healthful eating, physical activity, and tobacco use cessation; improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation; increased use of appropriate health care services; and increased likelihood that persons with undiagnosed diabetes are diagnosed.
- Long term outcomes include improved self-management of diabetes and asthma; slowing the upward trend of overweight and obesity; reduced complications of diabetes and asthma; and, ultimately, progress toward improved health-related quality of life.

Taken in sum, these outcomes reflect the expected results of the program as described in Steps Program Announcements 03135, 04234, and 04134[10,11,12]. In addition to these outcomes, Steps communities identify additional, community-specific outcomes as appropriate to their context and local populations. Finally, this logic model is expected to evolve as this program matures and lessons learned are incorporated into program design and operations.

Chapter 1: AN OVERVIEW OF PROGRAM EVALUATION ACROSS THE STEPS PROGRAM

What are the basic requirements for program evaluation at the national, state, and community levels?

Program evaluation is defined as "the systematic collection of information about the activities, characteristics and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development."[18] For the Steps Program, basic requirements for program evaluation span three categories of activity: 1) evaluation of each community-based program to meet the information needs of local stakeholders; 2) evaluation of the Steps Program as a whole to demonstrate accountability for use of public resources and results; and 3) participation in disease and risk factor surveillance as a source of data for program evaluation. Table 2 is a digest of work in each category of activity. The table includes responsibilities for CDC; state departments of health that coordinate programs in several communities; and Steps communities. These responsibilities range from completing specific tasks (e.g., data collection), to providing tangible support as others undertake the day to day work of program evaluation. For example, Steps communities participate annually in the Behavioral Risk Factor Surveillance System (BRFSS) and biennially in the Youth Risk Behavior Surveillance System (YRBSS). CDC provides technical assistance, and the state departments of health provide access to infrastructure or resources to support communities' participation in these systems. This type of assistance promotes coordinated data collection and efficient use of resources at the state and community levels. While these data are important sources of information for local program planning, use of the BRFSS and YRBSS as primary sources of information for program evaluation also improves the quality and consistency of data collected program-wide.

Table 2. Requirements for Program Evaluation across the Steps to a HealthierUS Cooperative Agreement Program—Overview of Responsibilities and Activities

Responsible Party	Program Evaluation Activities		
	Evaluation of Individual Community Programs	Evaluation of the Steps Program as a Whole	Disease and Risk Factor Surveillance as a Data Source for Program Evaluation
Centers for Disease Control and Prevention (CDC)	• Provide technical assistance to state departments of health or individual communities to support program evaluation planning, implementation, and use of findings	• Facilitate design and implementation of an evaluation of the Steps Program as a whole • Facilitate selection of core performance measures and indicators for use in all Steps communities • Facilitate and support data collection and reporting related to core performance measures	• Provide technical assistance to Steps communities to support participation in the BRFSS and YRBSS
State departments of health that coordinate programs in multiple communities	• Provide technical assistance to individual communities to support program evaluation planning, implementation, or use of findings	• Participate in design and implementation of an evaluation of the Steps Program as a whole • Participate in selection of core performance measures and indicators for use in all Steps communities • Facilitate and support data collection and reporting related to core performance measures • Provide state-level data required for reporting on core performance measures	• Link communities to state-based resources that support their participation in the BRFSS and YRBSS • Assure that community-based surveillance activities are well coordinated with state-based surveillance activities
Steps communities	• Design and implement an evaluation of their program • Collect and use data to meet local information needs	• Participate in design and implementation of an evaluation of the Steps Program as a whole • Participate in selection of core performance measures and indicators for use in all Steps communities • Provide community-level data required for reporting on core performance measures	• Collect representative BRFSS and YRBSS data according to schedule

BRFSS: Behavioral Risk Factor Surveillance System
YRBSS: Youth Risk Behavior Surveillance System

What is the scope of national-level program evaluation (i.e., the evaluation of the Steps Program as a whole)?

The primary purpose of national-level program evaluation is to demonstrate accountability for resources dedicated to the Steps Program. While accountability in public health is not a new concept, increasing competition for limited resources affirms the need to determine whether or not public dollars are well-used[19]. Thus, we use program evaluation findings to document use of public resources and results. Specifically, we document elements of program implementation and assess progress toward intended outcomes. Our evaluation questions further clarify the scope of this evaluation. These questions reflect a series of hard choices, made through a process of negotiating and prioritizing exactly which facets of the program to address. The primary evaluation questions are the following:

(1) Were resources used to implement the Steps Program as intended?

(2) Has the Steps Program made progress toward its intended outcomes?

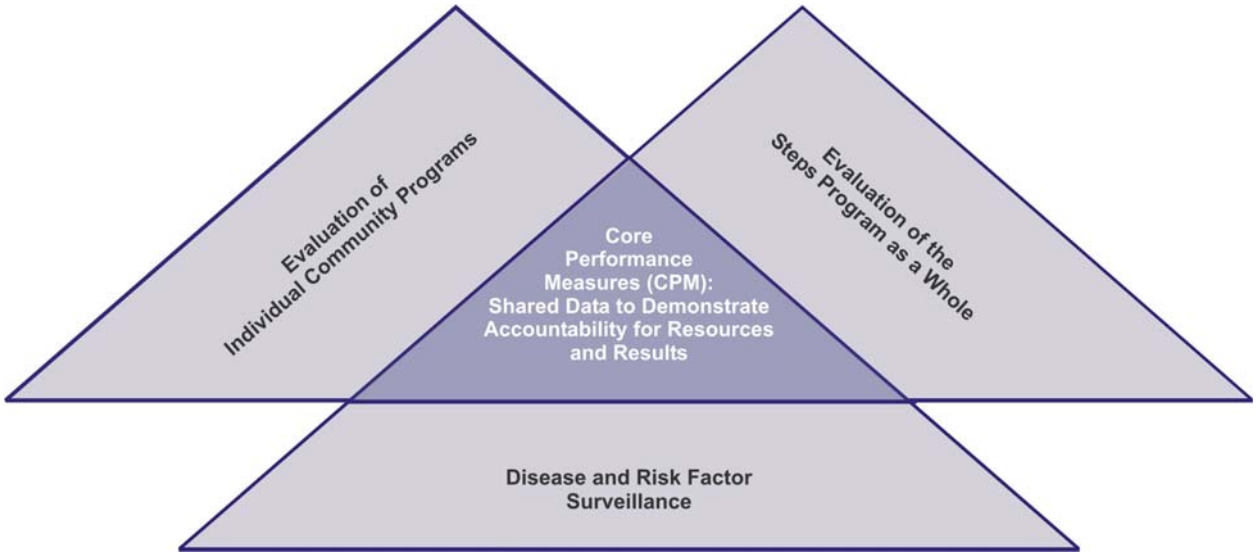
Program stakeholders provided feedback on a wide range of topics to assure that data collected to answer these questions meets users' information needs and relevant practice standards. Program stakeholders include those involved in program operations, those served or affected by the program, and primary users of the evaluation.[20] We include detailed documentation of the evaluation planning process in Appendix A.

How does national-level program evaluation relate to other evaluation activities across the Steps Program?

Program evaluation activities vary at the national, state, and community levels. However, these activities converge at one critical point: the need to demonstrate accountability for fiscal and human resources adequately. To that end, CDC staff and program stakeholders developed and implemented a shared set of core performance measures for use program-wide. As presented in Figure 3, the core performance measures represent the intersection of evaluation activities across the Steps Program.

While these measures are the primary component of national-level program evaluation, they are also an important factor in the evaluation of individual community programs. Furthermore, the core performance measures use data collected via disease and risk factor surveillance.

Figure 3. The Intersection of Evaluation Activities across the Steps to a HealthierUS Cooperative Agreement Program—Core Performance Measures



Chapter 2: CORE PERFORMANCE MEASURES—A SYSTEMATIC APPROACH TO PROCESS AND OUTCOME EVALUATION

What is performance measurement for the purposes of the Steps Program?

Performance measurement is the routine monitoring of program inputs, outputs, and short-term, intermediate, and long-term outcomes.[21] For health and human service programs, performance measurement typically involves collecting information about multiple aspects of the program, including the use of resources and efficiency of operations, direct products or services provided by the program, the quality of program activities, and the results of a program in relation to its intended purpose.[22] For the Steps Program, performance measurement is the centerpiece of the national evaluation, or evaluation of the program as a whole. Program staff at the national, state, and community levels work together to collect and report data on selected performance measures; we use this information to: 1) demonstrate how resources allocated to the Steps Program are used; 2) assess progress toward intended outcomes; and 3) support continuous program improvement whenever possible.

On signing the Government Performance and Results Act of 1993 (GPRA), President William J. Clinton encouraged federal agencies to "chart a course for every endeavor that we take the people's money for, see how well we are progressing, tell the public how we are doing, stop the things that don't work, and never stop improving the things that we think are worth investing in."[23] Following implementation of GPRA, HHS began establishing performance measures for all of its programs. Within HHS, performance measurement is a management tool to clarify goals, document specific contributions toward achieving those goals, and document the benefits of investment in each program.[24] Well designed performance measurement systems provide timely data for decision makers, especially those involved in improving the quality of programs[19]. In a climate of growing competition for limited resources, the ability to document good stewardship of public resources sets the stage for continued investment in a program.

What is the purpose of the core performance measures?

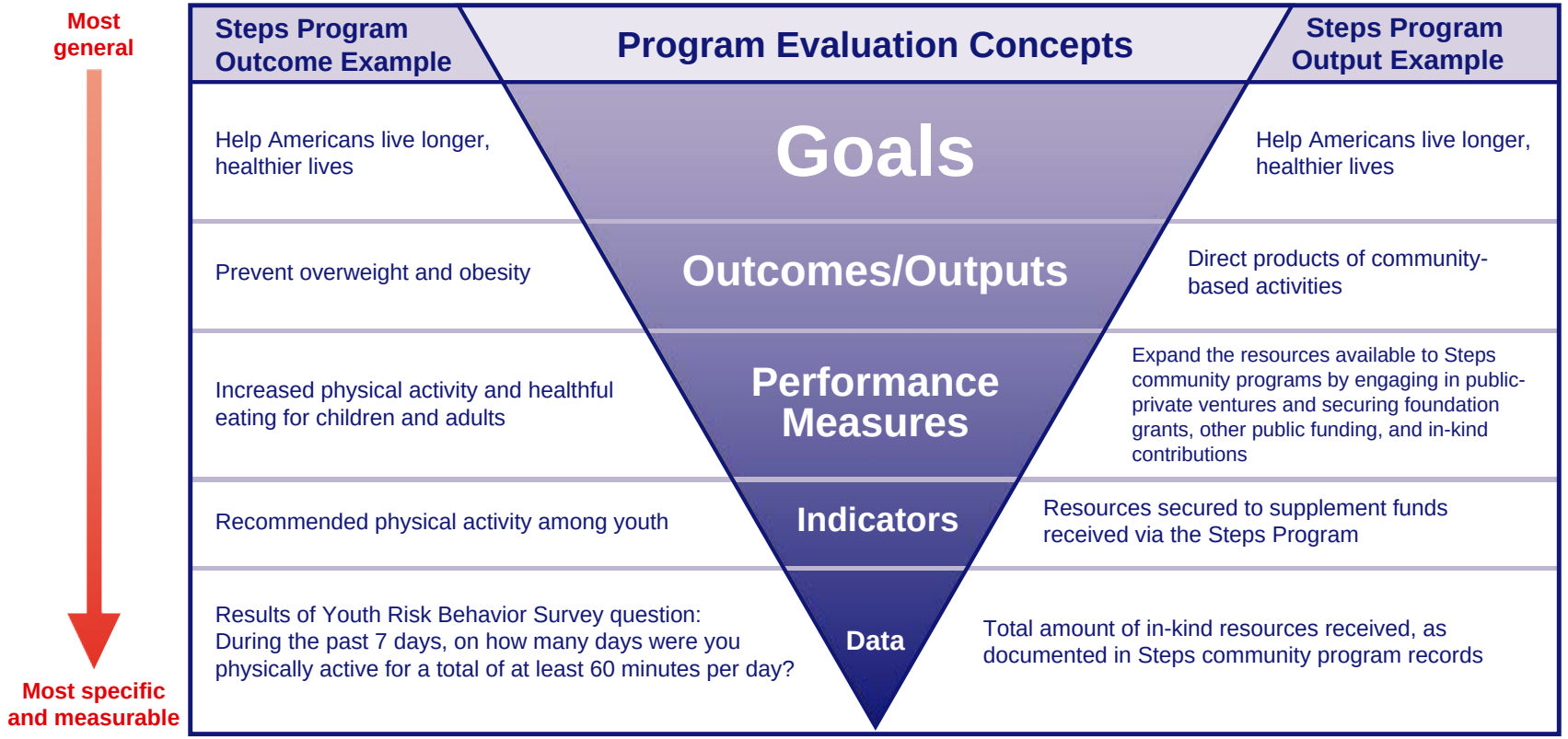
The primary purpose of the core performance measures is to demonstrate that the resources allocated to the Steps Program are accounted for and used wisely. This is consistent with CDC's pledge to the American people "to be a diligent steward of the funds entrusted to it."[25] The secondary purpose of the core performance measures is to support continuous quality improvement of the entire Steps Program. The Government Performance and Results Act of 1993 (GPRA) states that thoughtful planning and performance measurement can "improve the confidence of the American people in the capability of the Federal Government by systematically holding Federal agencies accountable for achieving program results."[26] Thus, we use these measures to document the results of the Steps Program in terms of cumulative progress toward intended outcomes (e.g., improved self-management of diabetes or asthma). The performance measures enable us to document and recognize program strengths and identify opportunities for improvement. Data collected may show which components of the program were not addressed as well as expected, or better than expected on the path to intended outcomes. In either case, CDC and all of the Steps communities learn valuable lessons that allow us to assure focus on activities with the greatest promise of results.

What are the core performance measures for the Steps Program?

Much like a spotlight focuses an audience's attention on an important action or event on the stage, performance measures draw attention to key aspects of a public health program. A *performance measure* is a quantitative or qualitative characterization of performance[22]. We assess performance on the basis of data collected on specific, observable indicators. An *indicator* is a measurable characteristic of a specified output or outcome.[27] For example, data for the indicator O-3.3, *recommended physical activity among adults aged 18 or older*, are used as evidence of progress (or lack of progress) toward performance measure O-3, *increased physical activity and healthful eating for children and adults*. There are also four additional indicators that are used as evidence of progress for this same performance measure.

To determine a program's status in relation to its goals requires increasing levels of specificity for data collection. Program staff and stakeholders must narrow broad concepts, or conditions of interest, for actual data collection, assessment, and use of findings. Figure 4 shows the increasing levels of specificity from program goals, to outcomes, to outputs, to performance measures, to indicators, and ultimately, to data collected. Figure 4 also includes examples of this process from Steps program outputs and outcomes.

Figure 4. Increasing Levels of Specificity in Program Evaluation Concepts on the Path to Measurement



Performance measurement systems "depend on a limited number of indicators that can track critical processes and outcomes."[28] Between December 2003 and November 2005, Steps Program staff and stakeholders worked to select 18 performance measures and 44 indicators for the Steps Program. Each performance measure and indicator reflects a critical component of the Steps Program. Figure 5 shows each component in the Steps Program logic model and its corresponding performance measure. Taken in sum, these core performance measures and indicators convey the essence of the Steps Program and its proposed contribution to the goal of reducing the burden of chronic diseases across Steps communities. To this end, these data provide important information on program implementation and progress toward intended health outcomes over time—data collected are intended to convey the cumulative results of the Steps Program and how the program achieved those results.[29] As the Steps Program evolves in the years ahead, program implementation measures or indicators may evolve to reflect the maturity of the program. At present, stakeholders have agreed on 8 program implementation and 10 outcome measures:

Program Implementation Measures (I)

I-1 Align the budget with program goals and intended outcomes.

I-2 Ensure that community objectives and activities are consistent with and supportive of state plans for the prevention and control of obesity, diabetes, asthma, and associated risk factors, but do not duplicate interventions or activities.

I-3 Expand the resources available to Steps community programs by engaging in public-private ventures and securing foundation grants, other public funding, and in-kind contributions.

I-4 Participate in coordinated monitoring and evaluation activities that include 1) collecting data and reporting on common performance measures and 2) planning and implementing national evaluation activities.

I-5 Expand existing surveillance mechanisms to collect representative Behavioral Risk Factor Surveillance System (BRFSS) data for adults annually and representative data from the Youth Risk Behavior Surveillance System (YRBSS) for high school students every 2 years

I-6 Use multiple, evidence-based public health strategies.

I-7 Improve integration of program components.

I-8 Document that intended populations participate in Steps communities' activities and interventions.

Outcome Measures (O)

O-1 Increased knowledge and awareness about healthy behaviors such as healthful eating, physical activity, and avoiding tobacco use.

O-2 Increased knowledge about getting appropriate preventive screenings.

O-3 Increased physical activity and healthful eating for children and adults.

O-4 Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.

O-5 Increased identification of persons with pre-diabetes and diabetes.

O-6 Improved self-management of diabetes and asthma.

O-7 Measurable improvements in healthful eating, physical activity, and tobacco use.

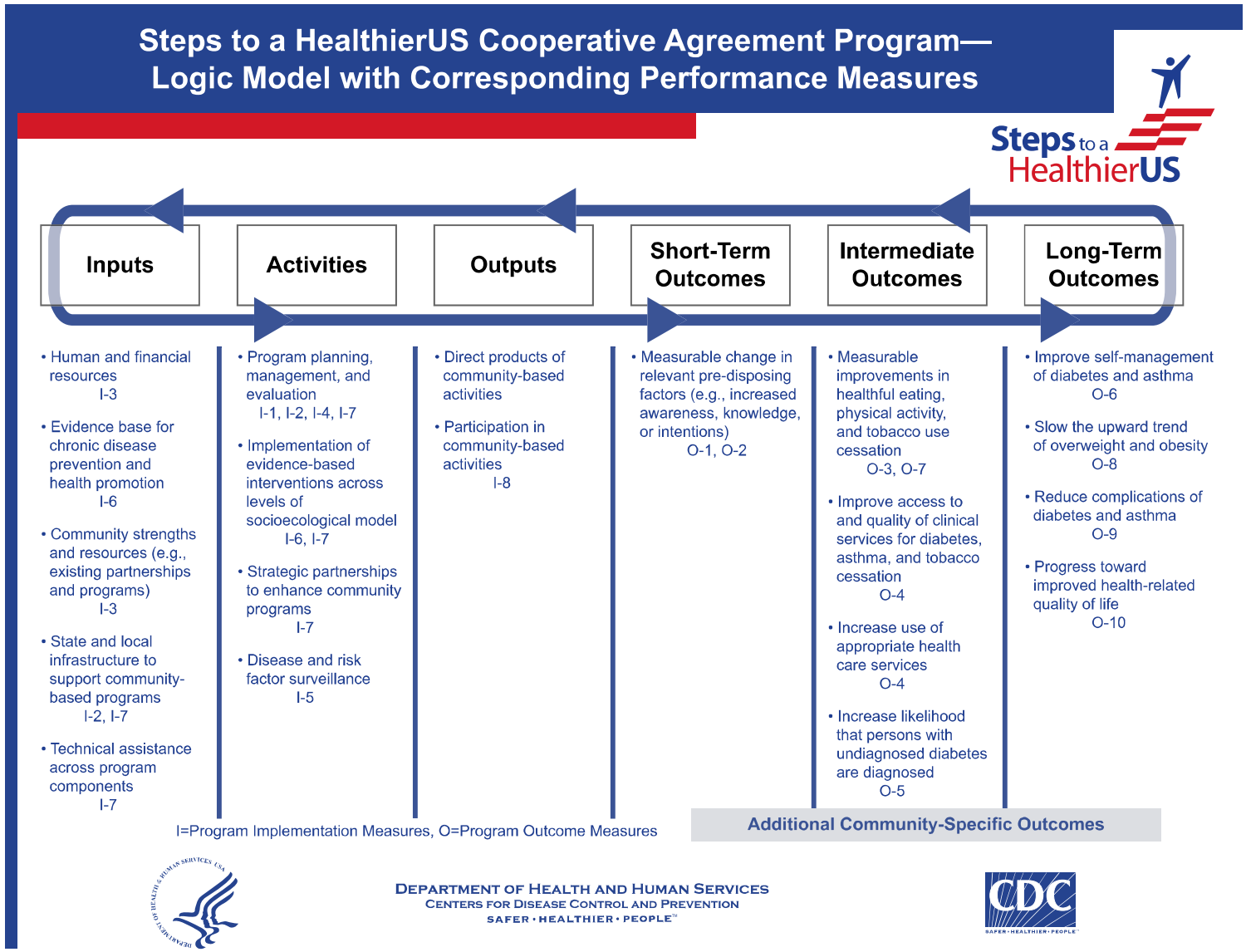
O-8 Slowed upward trend of overweight and obesity in Steps communities.

O-9 Reduced hospitalizations due to diabetes complications and asthma exacerbations.

O-10 Improved health-related quality of life.

Appendix B is a matrix of the 18 performance measures above and 44 related indicators; it includes the sources for data for each indicator and shows how each performance measure and indicator is consistent with relevant public health initiatives or documents (e.g., *The Guide to Community Preventive Services,* [30] *Healthy People 2010*[31]). To guide the user through the information, Appendix B also includes a map to the layout and content of the matrix.

Figure 5. Core Performance Measures Linked to each of the Program Components of the Steps Program Logic Model



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What is the difference between *attribution* and *contribution* in program evaluation, and why is it important to the Steps Program?

Attribution is an "estimation of the extent to which any results observed are caused by a program."[32] Contribution, on the other hand, is an estimation of the extent to which a program "plays a significant part in bringing about an end or result."[33] More traditional research in public health contexts seeks to determine attribution, or causality. To do this requires a certain level of control over the environment in which the program is conducted; this type of control is often unrealistic with regard to complex, community-based public health programs.[32] Because one of the core elements of the Steps Program is implementation of evidence-based interventions, we do not aim to assess the effectiveness of individual interventions. Attributing community-wide change to any individual program is especially difficult when multiple funding sources or service providers address the same health issue, [34] as is the case in Steps communities. Moreover, many widely used indicators for tracking health outcomes (e.g., hospitalization with asthma among adults aged 18 years or older) "are affected by many factors … so changes in outcomes cannot be attributed only to specific program effectiveness."[34] The evaluation of the Steps Program seeks to provide "evidence concerning the program's contributions to a long-term goal."[32] To this end, program evaluation includes information on both program implementation and progress toward intended outcomes. These data provide a sufficient picture of the program for accountability purposes, and offer evidence necessary for ongoing decision-making.

How do we use the core performance measures to document the Steps Program's contribution to reducing the burden of chronic diseases in Steps communities?

Public health programs often seek to "demonstrate that the program makes a contribution to reducing morbidity, mortality, or relevant risk factors."[32] As conceived and conducted here, performance measurement is a tool for assessing the program's contribution to a larger goal. We work from a clear description of the proposed relationship between program activities and intended outcomes.[35] As presented in the program logic model (Figure 2), the program's theory of change suggests that implementation of core elements of the program will contribute to progress toward the program's intended health outcomes. We use program implementation data to produce a succinct summary of how resources are used to implement core elements of the program. We use outcome data to track progress toward achieving the program's intended outcomes. If data collected suggest progress toward intended outcomes, it is not appropriate to assume that the Steps Program alone is responsible for the achievement. However, if the data show that elements of the program expected to generate progress toward the intended outcomes were implemented fully or sufficiently, and the data show progress toward the intended outcomes, it is reasonable to assume that the Steps Program contributed to measurable progress toward the intended outcomes.

How were performance measures, indicators, and data sources selected?

For this program and its evaluation, decisions about what to measure depended on two factors: 1) the intended use of data and 2) the priorities of the stakeholders choosing what to measure.[21] Stakeholders involved in developing the core performance measures are listed as contributors at the start of this document. Appendix A is an annotated timeline of the development of the Steps Program's approach to program evaluation and selection of performance measures, indicators, and data sources. The timeline provides a summary of steps taken to plan for and initiate data collection program-wide. Throughout this process, we considered the relevant scientific findings and standards of practice,[36] and continuously assessed the resources (human and fiscal) available for program evaluation at the national, state, and community levels. The annotated timeline offers users a picture of the time and resources required to design and implement this assessment. For example, the 18 performance measures emerged very early in the planning process and required only minor changes in content or language as the work continued. However, selecting specific, measurable indicators for each performance measure required in-depth discussion and negotiation with many stakeholders over a much longer period of time.

The 44 indicators selected (Figure 6) reflect the best available research and stakeholders' practice wisdom relevant to the Steps Program and its evaluation. To ensure that information collected on these indicators meets stakeholders' expectations of quality, we drew on the published and fugitive literature, generally accepted methods or standards for program evaluation and performance measurement, and existing information from other CDC programs. In most cases, nine factors guided the selection of indicators and data sources:

- **Strength of Evidence**: The scope and quality of information supporting the indicator as appropriate for assessing the output or outcome. We considered supporting information from published data, stakeholders' practice wisdom, and consultation with technical experts across CDC and HHS (e.g., CMS, AHRQ, HRSA).
- **Utility**: The degree to which an indicator helps to answer the evaluation questions at hand.

- **Face Validity**: The degree to which an indicator appears legitimate to stakeholders or decision-makers. For the Steps Program, information on an indicator has face validity if stakeholders view it as a meaningful marker of accountability.
- **Wide Use or Accepted Practice**: The degree to which use of an indicator is consistent with current or accepted practice in public health. For example, some indicators selected to document program implementation are also included in the Program Assessment Rating Tool (PART).[37] Likewise, some indicators selected to monitor progress toward the Steps Program's intended outcomes are included in *Healthy People 2010* and *Indicators for Chronic Disease Surveillance*.[31,38]
- **Availability of data via the BRFSS or YRBSS**: Data from a surveillance system can be useful for measuring health indicators needed for accountability.[39] Because participation in the BRFSS and YRBSS is an important element of the Steps Program, we use indicators for which data are available via these surveillance systems whenever possible and appropriate. Given the history of these systems, we expect that these data will be of sufficient quality and consistency.
- **Data Quality**: For outcome measures, the degree to which information recorded by a surveillance system is complete, reliable, and valid.[39] Detailed information on the quality of data collected via the BRFSS and YRBSS is available at www.cdc.gov/brfss and www.cdc.gov/HealthyYouth/yrbs/index.htm.[40,41] For all sources of information, we assess data quality and look to avoid poor design or management of data collection processes.
- **Timeliness of Data**: Timeliness of data includes two elements: frequency and currency. Data should be available on a frequent enough basis to regularly inform program management decisions. Data should also be sufficiently up to date to be useful in decision-making.[42] Timeliness is especially challenging in selecting sources of data for outcome indicators.
- **Investment of Resources**: The amount of funds, time, effort, materials, or expertise needed to collect, analyze, and use data on a specific indicator. The actual cost of using a specific indicator varies according to the capacity of a department of health or organization to collect data.[43] Though difficult to assess precisely, the cost of collecting data for an indicator, in terms of human and financial resources, should not exceed the utility of the information.[42]

- **Maximum use of data in Steps communities:** Because data collection is resource intensive, Steps communities should be able to use the data collected for multiple purposes (e.g., mid-year or annual reports to CDC's Procurement and Grants Office (PGO), ongoing program planning, or quality improvement efforts). To the extent possible, we selected indicators for which data can be collected via existing mechanisms (i.e., BRFSS and YRBSS, two well established data collection systems) and for which comparisons can be made to other communities, states, and the nation as a whole.

For each indicator, we developed a clear and comprehensive definition to help promote a reasonable level of consistency over time. This information is important both for simple indicators (i.e., those indicators comprised of data from one survey item) and for multidimensional indicators (i.e., those indicators comprised of more than one survey item—a calculated variable). In particular, definitions for multidimensional indicators must include clear a description for all survey items and method of aggregation. If indicators are not defined clearly and consistently, the data collected are less likely to provide a useful assessment of progress. These definitions are essential for collecting consistent data across multiple program sites. We provide a definition for each indicator in Appendix C. In addition to providing measurement definitions, indicator summaries contain information about the rationale for selecting the indicator; the intended use of data collected on the indicator; the frequency of data collection; and the indicator's consistency with relevant agencies, initiatives, and guidance documents. At the front of Appendix C is a map that explains the layout and content of the indicator summaries.

Figure 6. Steps to a HealthierUS Cooperative Agreement Program Core Performance Measures and Indicators

Program Implementation Measures (I)

I-1 Align the budget with program goals and intended outcomes.

I-1.1. Fiscal resources allocated to address Steps focus areas and key health outcomes

I-2 Ensure that community objectives and activities are consistent with and supportive of state plans for the prevention and control of obesity, diabetes, asthma, and associated risk factors, but do not duplicate interventions or activities.

I-2.1. Objectives and activities linked to the work of state programs to prevent and control obesity, diabetes, asthma, or associated risk factors.

I-3 Expand the resources available to Steps community programs by engaging in public-private ventures and securing foundation grants, other public funding, and in-kind contributions.

I-3.1. Resources secured to supplement funds received via the Steps to a HealthierUS Cooperative Agreement Program.

I-4 Participate in coordinated monitoring and evaluation activities that include 1) collecting data and reporting on common performance measures and 2) planning and implementing national evaluation activities.

I-4.1. Submission of data on core performance measures according to established schedule

I-4.2. Participation in national-level evaluation tasks (e.g., sending feedback to Steps Program Office (SPO) on draft documents, task-specific workgroups, conference calls).

I-5 Expand existing surveillance mechanisms to collect representative Behavioral Risk Factor Surveillance System (BRFSS) data for adults annually and representative data from the Youth Risk Behavior Surveillance System (YRBSS) for high school students every 2 years

I-5.1. Appropriate and representative data collected via Behavioral Risk Factor Surveillance System.

I-5.2. Appropriate and representative data collected via Youth Risk Behavior Surveillance System.

I-6 Use multiple, evidence-based public health strategies.

I-6.1. Documented evidence for activities related to all the diseases and risk factors of interest to the Steps Program.

I-7 Improve integration of program components.

I-7.1. Implementation of 1) interventions that address at least two diseases or risk factors and 2) at least one intervention at each key sector.

I-7.2. Implementation of evidenced-based interventions that address access to healthcare, quality of healthcare, and use of healthcare.

I-7.3. Implementation of evidenced-based interventions across the socio-ecological model (i.e., individual, interpersonal, organizational, community, and public policy).

I-7.4. Partnership with the YMCA of the USA, or its local affiliate, to improve access to places for physical activity.

I-7.5. Composition and function of Steps Leadership Team (e.g., inclusion of non-traditional agencies or partners, state or local categorical programs, key community-based organizations, or representatives of the healthcare sector).

I-7.6. Composition and function of Steps State-Community Management Team (e.g., inclusion of coordinated Steps communities, non-traditional agencies or partners, state or local categorical programs, key community-based organizations, or representatives of the healthcare sector).

I-7.7. Provision of technical assistance to state-coordinated Steps communities (State only).

I-8 Document that intended populations participate in Steps communities' activities and interventions.

I-8.1. Reach (i.e., service to intervention areas or specific populations identified in community action plan)

Outcome Measures (O)

O-1 Increased knowledge and awareness about healthy behaviors such as healthful eating, physical activity, and avoiding tobacco use.

Community-specific indicators

O-2 Increased knowledge about getting appropriate preventive screenings.

Community-specific indicators

O-3 Increased physical activity and healthful eating for children and adults.

- O-3.1. Fruit and vegetable consumption among adults aged 18 or older
- O-3.2. Fruit and vegetable consumption among youth
- O-3.3. Recommended physical activity among adults aged 18 or older
- O-3.4. Recommended physical activity among youth
- O-3.5. Television viewing among youth

O-4 Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.

- O-4.1. Health care access
- O-4.2. Foot examination among adults aged 18 or older with diabetes
- O-4.3. Dilated eye examination among adults aged 18 or older with diabetes
- O-4.4. Glycosylated hemoglobin measurement at least twice a year among adults aged 18 or older with diabetes
- O-4.5. Adults with asthma aged 18 or older receiving routine checkups for asthma
- O-4.6. Adult smokers aged 18 or older advised by health care provider to quit smoking
- O-4.7. Tobacco use cessation attempts by adolescent smokers

O-5 Increased identification of persons with pre-diabetes and diabetes.

- O-5.1. Reduce the overall rate of diabetes that is clinically diagnosed among adults
- O-5.2. Reduce the overall rate of diabetes that is clinically diagnosed among youth

O-6 Improved self-management of diabetes and asthma.

- O-6.1. Self blood-glucose monitoring among adults aged 18 or older with diabetes
- O-6.2. Self foot exam among adults aged 18 or older with diabetes
- O-6.3. Symptom-free days among adults aged 18 or older with asthma

O-7 Measurable improvements in healthful eating, physical activity, and tobacco use.

Indicators include O-3.1 – O-3.5 in addition to those below

- O-7.1. Tobacco use cessation attempts by adult smokers
- O-7.2. Tobacco use cessation attempts by adolescent smokers
- O-7.3. Cigarette smoking among adults aged 18 or older
- O-7.4. Cigarette smoking among youth

O-8 Slowed upward trend of overweight and obesity in Steps communities.

- O-8.1. Prevalence of overweight or obesity among adults aged 18 or older
- O-8.2. Obesity prevalence among adults aged 18 or older
- O-8.3. Overweight prevalence among youth

O-9 Reduced hospitalizations due to diabetes complications and asthma exacerbations.

- O-9.1. Hospitalization with asthma among adults aged 18 or older
- O-9.2. Hospitalization with asthma among youth
- O-9.3. Hospitalization with diabetes among adults aged 18 or older

O-10 Improved health-related quality of life.

- O-10.1 Mean number of Healthy Days among adults aged 18 or older

Chapter 3: CORE PERFORMANCE MEASURES—DATA COLLECTION AND REPORTING

How do Steps communities collect data required to report on core performance measures?

To report on core performance measures, Steps communities collect data on program implementation and on progress toward intended outcomes. Staff in Steps communities provide data to document program implementation from their own records or progress reports. For the most part, these data are collected or prepared by personnel responsible for program management or evaluation. By and large, data on program implementation measures are qualitative.

To measure progress toward intended outcomes, Steps communities participate in the BRFSS and the YRBSS (see Appendix D for a list of all BRFSS and YRBSS questions necessary for reporting on core performance measures). To ensure coordinated action and efficient use of resources, data collection draws on infrastructure and capacity at the national, state, and local levels (e.g. technical assistance from CDC, access to schools and students through state departments of education). Data collection procedures or processes vary by community. For example, some Steps communities conduct a stand-alone survey in their intervention area, and others coordinate data collection with the state or local BRFSS or YRBSS. In a few cases, Steps communities adapted their data collection methods to respond to local cultural needs. Nonetheless, CDC staff and Steps Program stakeholders agree that all data collection methods are similar enough to produce information usable for performance measurement. In addition to providing information for evaluation of the Steps Program as a whole, disease and risk factor surveillance data provide important information for evaluation of individual community programs.

For most Steps communities, CDC does the cleaning, weighting, and analysis of surveillance data. CDC provides each communities a report of data needed to participate in the evaluation of the Steps Program as a whole. To report on indicators for which data are collected through the BRFSS and YRBSS, Steps communities need only select the relevant data from the reports the

information to the core performance measures reporting forms described in the next section. Appendix E contains a map that presents the content and layout of the BRFS report. Appendix F contains a map that presents the same information for the YRBS report.

How are data reported to CDC?

Beginning in November 2006, Steps communities submit data on the core performance measures annually. State departments of health that coordinate programs in multiple communities complete a supplemental state report that only includes indicators I-7.6 and I-7.7. Table 3 is a timeline of key activities relevant to data collection and reporting on core performance measures. For Steps communities whose surveillance data are not analyzed by CDC, the schedule may differ slightly.

Table 3. Timeline for Core Performance Measures Data Collection and Reporting

Specific Task(s)	Timeframe for Completion
Community Behavioral Risk Factor Survey (BRFS) data collected.	Varies by Steps community. For example, some communities collect 1/12 of their data each month, and others collect all of their data at one time.
BRFS data submitted to CDC for processing and analysis.	Varies by Steps community. All communities should submit data by the end of the calendar year.
BRFS results returned to communities.	Spring (e.g., 2006 data reports will be sent to communities in May–June 2007).
Youth Risk Behavior Survey (YRBS) data collected.	Spring of odd-numbered years.
YRBS data submitted to CDC for processing and analysis.	Spring of odd-numbered years.
YRBS results returned to communities.	8–12 weeks after data sent to CDC for processing and analysis.
Core performance measures data reported to CDC.	November each year. Communities report on adult outcome indicators (e.g., indicators that use BRFS data) annually. Data for these indicators will be for the **prior** year (e.g., data for 2006 are reported in November 2007). Communities report on youth outcome indicators (i.e., indicators that use YRBS data) biennially. Data for these indicators will be for the **current** year (e.g., YRBS data for 2007 are reported in November 2007; no YRBS data are reported in November 2008). Communities report on implementation indicators annually. Data for these indicators will be drawn from program records and documents for the **most recent** annual funding cycle (e.g., program data for September 22, 2006–September 21, 2007 are reported in November 2007).

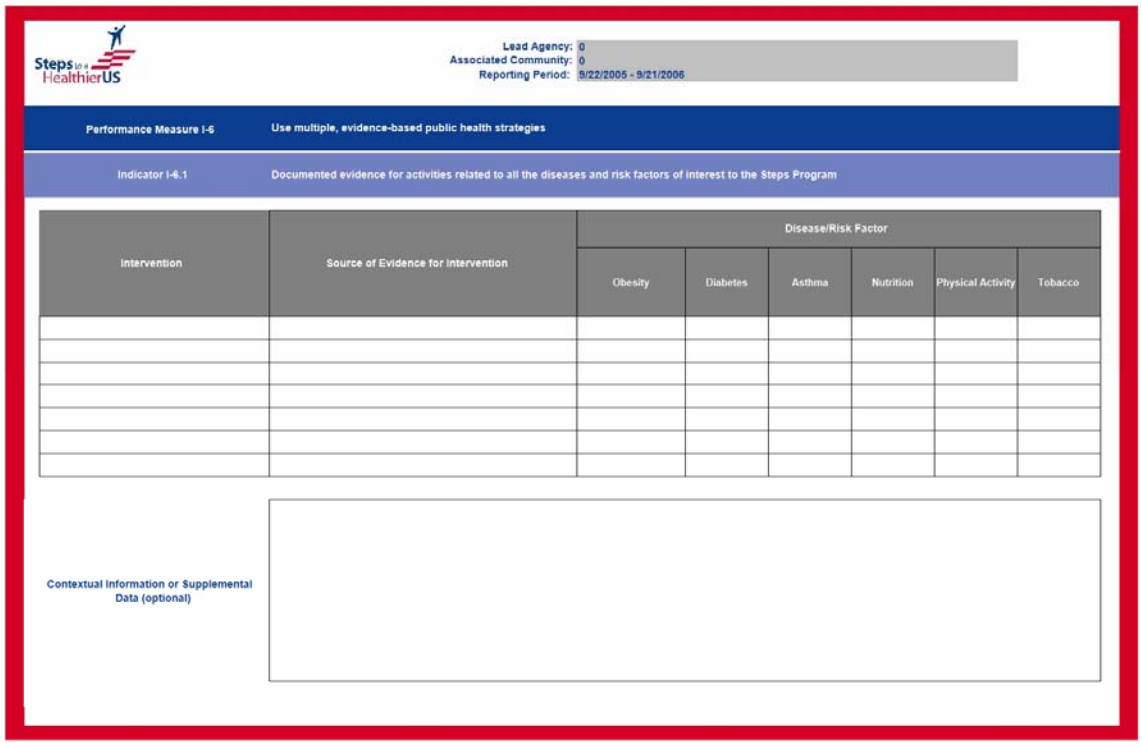
We expect all Steps communities to collect BRFS data annually, YRBS data biennially, and to report on core performance measures each November for the duration of the Steps Program.

CDC provides communities with a set of standardized forms for reporting on core performance measures. We provide these forms as a Microsoft Excel workbook. After completing the workbook, Steps communities return it to CDC electronic or hard copy. The forms capture all data required for indicators; additional space is provided for supplemental information that

explains or supports the required data. Steps communities are not required to submit supplemental information, but we encourage them to use this opportunity to tell their program's story in a richer format. Examples of supplemental information Steps communities might send include descriptions of local events or conditions that may influence program outputs or outcomes, and data from questionnaires, surveys, or sources other than the BRFSS or YRBSS. Such information is useful because it allows CDC to better understand a community's achievement in light of their context or state and national trends. Detailed instructions for completing these forms are embedded within the data entry fields. Figure 7 provides an example of reporting forms for two indicators—one program implementation indicator (*I-6.1. Documented evidence for activities related to all the diseases and risk factors of interest to the Steps Program*) and one outcome indicator (*O-7.1. Tobacco use cessation attempts by adult smokers*).

Once communities submit their data, CDC reviews the reporting forms for completeness and prepares the information for assessment. CDC staff work collaboratively with Steps communities make the reporting process as smooth as possible.

Figure 7. Steps to a HealthierUS Cooperative Agreement Program Core Performance Measures Reporting Forms for Indicators I-6.1 and 0-7.1



Steps to a HealthierUS

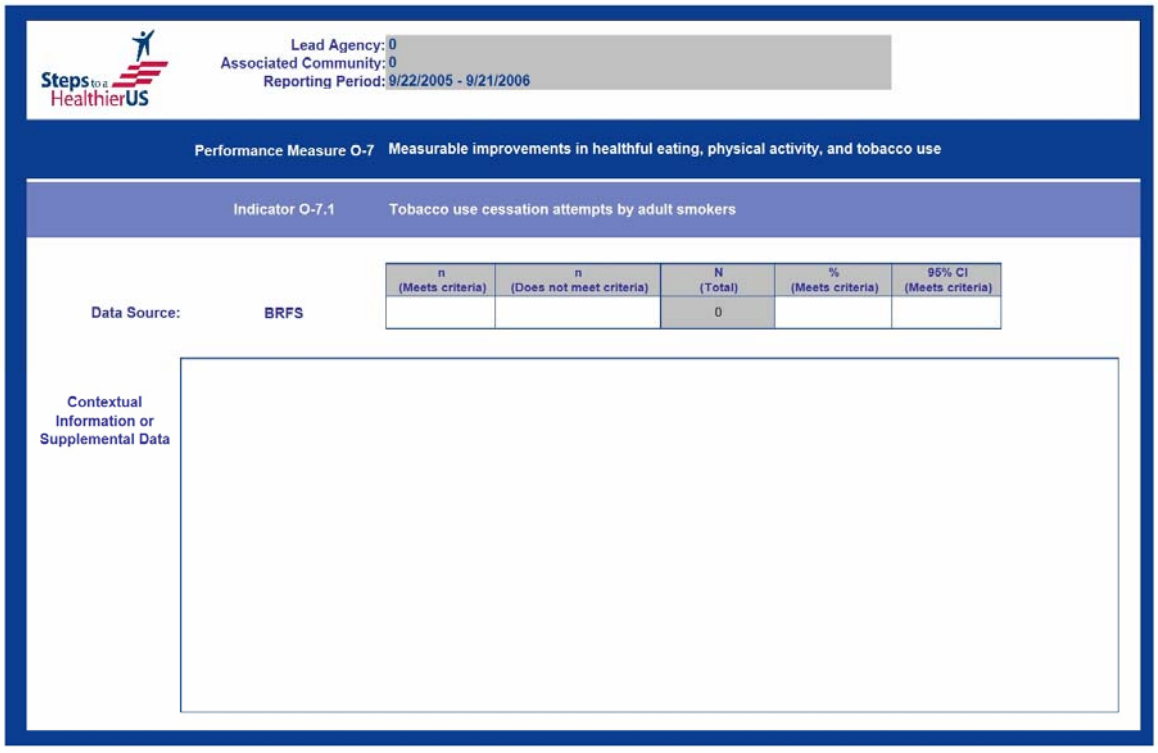
Lead Agency: 0
Associated Community: 0
Reporting Period: 9/22/2005 - 9/21/2006

Performance Measure I-6 Use multiple, evidence-based public health strategies

Indicator I-6.1 Documented evidence for activities related to all the diseases and risk factors of interest to the Steps Program

Intervention	Source of Evidence for Intervention	Disease/Risk Factor					
		Obesity	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco

Contextual Information or Supplemental Data (optional)



Steps to a HealthierUS

Lead Agency: 0
Associated Community: 0
Reporting Period: 9/22/2005 - 9/21/2006

Performance Measure O-7 Measurable improvements in healthful eating, physical activity, and tobacco use

Indicator O-7.1 Tobacco use cessation attempts by adult smokers

	n (Meets criteria)	n (Does not meet criteria)	N (Total)	% (Meets criteria)	95% CI (Meets criteria)
Data Source: BRFS			0		

Contextual Information or Supplemental Data

Chapter 4: CORE PERFORMANCE MEASURES—DATA ANALYSIS AND USE OF FINDINGS

How do we analyze data submitted by Steps communities?

Data analysis procedures vary depending on whether we are assessing program implementation or outcomes. For all performance measures, CDC begins by checking that the information supplied by the communities is complete. For program implementation measures, the intent of data analysis is to determine whether core elements of the Steps Program were implemented as intended. We use basic content analysis techniques to describe key features of program implementation. For program outcome measures, the intent of data analysis is to assess whether Steps communities are making progress toward intended outcomes. Once data for indicators are processed using statistical methods, we use basic comparisons to assess progress. On the basis of data submitted, we compile descriptive information for each performance measure. For example, for the indicator *use multiple, evidence-based public health strategies,* we include examples of evidence-based interventions in the Steps Program's focus areas and across the socio-ecological model; for the indicator *measurable improvements in healthful eating, physical activity, and tobacco use,* descriptive information includes the number of communities that have demonstrated progress in achieving recommended levels of physical activity among adults.

How do we document program implementation and assess progress toward intended outcomes over time?

For each performance measure, we look at the data submitted on all relevant indicators for that performance measure in order to document program implementation or assess progress toward intended outcomes. Each Steps community is compared to itself over time; core performance measures data are not used to compare Steps communities to one another. Descriptive data from program implementation indicators paint a picture of how Steps communities implemented core elements of the Steps Program. We use data from outcome indicators to assess whether Steps communities are making progress toward intended outcomes over time.

All Steps communities share the same intended health outcomes; however, what constitutes progress toward those outcomes is specific to each community. Therefore, we do not specify standards or levels of performance. Instead, we give only basic expectations for progress toward short-term, intermediate, and long-term outcomes. For the purpose of accounting for resources, progress toward intended outcomes is *any* amount of positive change in a specific indicator (i.e., increase or decrease, as appropriate). For example, any increase in the indicator *fruit and vegetable consumption among adults aged 18 or older* constitutes adequate performance. In some cases, data for a specific indicator may show no change; such a finding may also constitute adequate performance when it is compared with national or state trends (e.g., progress is indicated if a Steps community is holding steady on fruit and vegetable consumption while state estimates for this indicator decrease).

This approach to assessing progress affirms the importance of community context to performance measurement. Each Steps community's program takes place in a unique environment, and that environment influences both the implementation and outcomes of the program. Examples of community context include local laws or policies, cultural traditions, or major events like Hurricane Katrina. As needed, contextual information is included in reports to clarify information about use of resources or program results**.**

How do we use findings to account for resources dedicated to the Steps Program?

We account for resources dedicated to the Steps Program by 1) documenting whether core elements of the Steps Program were implemented as intended and 2) documenting whether or not progress was made toward intended outcomes. For the core performance measures intended purposes, we do not identify an individual Steps community without permission. Rather, we report summaries of cumulative data from all Steps communities on each performance measure. In other words, we prepare a report that 1) describes how core elements of the Steps Program were implemented and 2) assesses progress toward short-term, intermediate, and long-term outcomes across the entire Steps Program. For example, a report might indicate that in half of all Steps communities, fruit and vegetable consumption by adults increased; however, we would not name the specific Steps communities in which this finding occurred. With permission, we may

name individual communities as examples of strong program implementation or exceptional progress toward intended health outcomes. However, we do not report our assessment of an individual community's progress for the purpose of accountability or continued funding. Performance data are not used to reduce, rescind, or increase funding for Steps communities.

How do we use findings to inform ongoing improvement across the Steps Program?

Although the primary intended use of data is to demonstrate accountability for program resources, we also use these data to support a process of continuous quality improvement program-wide. These data provide practical information to determine where and how to make improvements in program design and operations. The findings equate to timely, high-quality evidence for decision making. For example, CDC uses this information to allocate resources for technical assistance where they are needed. Concise snapshots of program implementation and progress toward intended health outcomes provide additional tools to better engage program stakeholders, partners, and the public in efforts to prevent chronic disease and promote health in all Steps communities.

Appendix A

Development and Selection of the Steps to a HealthierUS Cooperative Agreement Program's Performance Measures, Indicators, and Data Sources

Annotated Timeline

October – December 2003	CDC staff reviewed the applications of communities funded in 2003 for content relevant to the development of core performance measures and related indicators. CDC staff developed detailed matrices of the outcomes and indicators presented in these applications for each of the six program focus areas (i.e., obesity, diabetes, asthma, nutrition, physical activity, and tobacco use).
December 2003	In Washington, D.C., 44 representatives of communities funded in 2003 participated in working sessions to discuss national-level program evaluation. Small groups proposed outcomes for all levels of the socio-ecological model in each of the six program focus areas. CDC used this information to expand the matrix of short-term, intermediate and long-term outcomes to be considered in developing a national program logic model, preparing a national plan for program evaluation, and identifying core performance measures and indicators.

January – February 2004

Steps communities reviewed the expanded list of possible program outcomes. We asked reviewers the following questions:

- Which outcomes best reflect community-based programs?
- Are there outcomes or indicators that should be ruled out quickly?
- Are there important outcomes or indicators missing from the list?
- Can we identify a set of "core" outcomes for all Steps communities?

We also shared the expanded list of outcomes with HHS and CDC staff working in programs or settings related to the Steps Program. We asked these stakeholders the following questions:

- Which outcomes best reflect community-based programs and agency priorities?
- Are the outcomes and indicators consistent with those measured by your program?
- Are there outcomes or indicators that should be ruled out quickly? If so, why?
- What outcomes or indicators are missing?
- Can we identify a set of "core" outcomes for all Steps communities that are consistent with your approach to performance measurement?

April 2004

Steps Program staff shared a revised list of outcomes and indicators with Steps communities and CDC stakeholders for review and feedback. We encouraged all reviewers to provide detailed comments that included the programmatic or scientific rationale for recommendations. 10 of 12 funded Steps programs provided written feedback.

May 2004

CDC finalized specific health outcomes to be measured via national-level program evaluation.

August 2004

CDC staff prepared a draft of core performance measures linked to program outcomes defined via stakeholder input.

CDC staff held a conference call with partners at the Centers for Medicare & Medicaid Services (CMS) to discuss accessibility of hospitalization discharge data.

September 2004

CDC staff reviewed existing surveys and item inventories to determine possible indicators on factors that predispose people to obesity, diabetes, or asthma (predisposing factors) for core performance measures O-1 and O-2.

CDC held a second conference call with partners at CMS to discuss accessibility of hospitalization discharge data. Because of issues around timeliness of data and potential burden on community resources, CDC concluded that other data sources would be more appropriate for the purposes of the core performance measures.

October 2004

CDC staff prepared and distributed two documents to assist Steps communities and stakeholders in understanding the links between the Behavioral Risk Factor Surveillance System (BRFSS) and proposed core performance measures:

- Matrix of proposed core performance measures and the BRFSS items needed to obtain data on those measures.
- List of BRFSS items already used by each Steps community.

December 2004

CDC staff gave all Steps communities a revised matrix of core performance measures and proposed indicators linked to relevant *Healthy People 2010*[31] objectives and *Indicators for Chronic Disease Surveillance*[38].

CDC began using the Steps WebBoard to disseminate information about core performance measures to Steps communities.

February 2005

CDC staff held two conference calls with all Steps communities to present and discuss the materials released in December 2004. Participating in these calls were 62 representatives from Steps communities, including representatives from 21 of the 22 funded programs. The following decisions were made during the calls:

- CDC will create a core performance measures workgroup.
- CDC will provide monthly updates on core performance measures via conference calls with all communities.

CDC staff met with the Deputy Associate Director for Science at CDC's National Center for Chronic Disease Prevention and Health Promotion to discuss the overall approach to the Steps core performance measures.

March 2005

The core performance measures workgroup was convened with 34 participants: an independent facilitator, 19 representatives of Steps communities, and 14 CDC staff and contractors. The workgroup met weekly to establish a plan of action and discuss substantive issues relevant to the performance measurement approach, specific outcomes, or indicators. Activities of the workgroup were the following:

- Listing practical considerations relevant to this activity.
- Mapping core performance measures to Steps Program Announcements 03135, 04234, and 04134.
- Reviewing performance measures in other agencies and organizations, including how they were developed and implemented.
- Posting detailed minutes for each meeting to the Steps WebBoard.
- Posting all feedback received from stakeholders to the Steps WebBoard.

Steps Program staff met with key partners and liaisons from CDC divisions whose primary responsibility is one of the Steps Program focus areas:

- Division of Adolescent and School Health.
- Division of Adult and Community Health.
- Division of Adult and Community Health, Behavioral Surveillance Branch.
- Division of Diabetes Translation.
- Division of Nutrition and Physical Activity.
- Division of Nutrition and Physical Activity, Obesity Trailblazer Team.
- Office of the Director, National Center for Chronic Disease Prevention and Health Promotion.

The purpose of the meeting was to review Steps Program decisions about the core performance measures. The key recommendation of meeting participants was to expand the core performance measures to include documentation of key features of program implementation.

April 2005

The core performance measures workgroup continued to meet weekly to review and discuss proposed data sources and possible indicators to address predisposing factors. The following were products of the workgroup:

- Summary of current approaches to measuring predisposing factors at all Steps communities.
- Detailed minutes for each meeting. (These were posted to the Steps WebBoard).
- Log of all feedback received from stakeholders. (This was posted to the Steps WebBoard).

The workgroup also made the following decisions:

- CDC will create one-page summaries on each proposed indicator.
- CDC will create reporting templates for all core performance measures.
- CDC will provide data processing information for BRFSS and Youth Risk Behavior Surveillance System (YRBSS) indicators.

CDC staff met with representatives from the Division of Adult and Community Health, Behavioral Surveillance Branch, to discuss general BRFSS issues related to the core performance measures.

CDC staff reviewed current indicators and reporting templates to ensure consistency with BRFSS and YRBSS protocols and procedures.

At the monthly meeting with representatives from the CDC divisions that work in the Steps Program focus areas (Steps Division Liaisons), Steps Program staff discussed key issues and distributed 1) documentation of the development process for the core performance measures and 2) a draft of the core performance measures.

May 2005

The core performance measures workgroup moved to bi-weekly meetings to allow CDC staff sufficient time to prepare materials. The following decisions were made during workgroup meetings:

- The approach to measuring predisposing factors will differ from the approach to measuring other outcome-related measures (i.e., indicators and data sources will vary from one Steps community to another).
- CDC staff will develop a comprehensive guidance document for Steps communities on how to use the core performance measures. It will include documentation of the development process and specific protocols for implementing performance measurement.
- The core performance measures will be the heart of the national Steps Program evaluation; a separate survey to capture data on health outcomes will not be implemented.

CDC posted detailed minutes for each meeting and a log of all feedback received from stakeholders to the Steps WebBoard.

CDC staff met with key stakeholders from the Agency for Healthcare Research and Quality (AHRQ) to review and discuss healthcare-related indicators and data sources (i.e., access to healthcare, quality of healthcare, and use of the healthcare system). AHRQ provided detailed recommendations and guidance for moving forward in this area. Steps Program staff also met with representatives from CDC's Obesity Trailblazers Team (Division of Nutrition and Physical Activity) and CDC's Office on Smoking and Health to discuss appropriate indicators for performance measures O-1 and O-2.

Steps Program staff began working with staff from the Behavioral Surveillance Branch to develop special BRFSS reports tailored to the Steps core performance measures.

June 2005

The core performance measures workgroup met once to review feedback on the draft core performance measures matrix. The following decisions were made during the workgroup meeting:

- Rationale and justification for the Steps Program's approach to the core performance measures will be included in the final guidance document.
- Assessment of data on performance measures will emphasize identifying technical assistance opportunities prior to any funding decisions (i.e., technical assistance to help Steps communities improve their performance will be provided before funding decisions are made).

CDC posted detailed minutes for each meeting and a log of all feedback received from stakeholders to the Steps WebBoard.

The third Steps Cooperative Agreement Workshop for Steps communities took place June 21-23 in Denver, Colorado. A plenary session on the national evaluation focused on the core performance measures. CDC presented the most recent draft of the matrix and information about its development process.

July 2005

CDC issued a final call for comments on the draft core performance measures matrix and invited Steps communities and CDC and HHS stakeholders to provide feedback.

CDC held a conference call with all Steps communities to ensure that they had the information needed to review and provide feedback on the core performance measures matrix. The following decisions were made during the call:

- Assessment criteria need to be developed.
- The Steps Program evaluation should reflect a community-based context; "best available" measures will be necessary.
- The key audience for the core performance measures matrix is Steps communities.
- For core performance measures on predisposing factors (O-1 and O-2), Steps communities should use items most relevant for their programs. For O-2, CDC recommends that indicators reinforce the recommendations of the U.S. Preventive Services Task Force contained in the *Guide to Clinical Preventive Services.* [44]

CDC posted detailed minutes for each meeting and a log of all feedback received from stakeholders to the Steps WebBoard.

July – September 2005

A total of 26 people provided written feedback on the updated draft core performance measures matrix: 22 Steps community staff members and 4 CDC or HHS stakeholders.

CDC reviewed all comments and revised the core performance measures matrix as needed to respond to recommendations from Steps communities and partners.

Steps Program staff met with representatives from the CDC's National Center for Environmental health to identify and reach consensus on appropriate asthma indicators.

October 2005

CDC presented the revised core performance measures matrix to the workgroup. Key topics included:

- Additional symbols added to indicate consistency with other sources (e.g. *The Guide to Community Preventive Services*[30], *The Guide to Clinical Preventive Services*[44]).
- Alignment of indicators for CPM O-4, O-6, and O-9 according to issue addressed (i.e. access to healthcare, quality of healthcare, self-management of disease, and complications of disease).
- Addition of one indicator and changes to others to improve the scientific evidence for the core performance measures.
- Addition of CPM O-10: Healthy Days.

The workgroup supported the revised version of the matrix.

CDC posted detailed minutes for each meeting and a log of all feedback received from stakeholders to the Steps WebBoard.

November 2005

Steps Program staff met with representatives of CDC's Division of Diabetes Translation to discuss the assessment of indicator O-9.3. The group reached consensus that the Steps Program's innovative approach is an acceptable proxy measure.

The final core performance measures matrix was distributed to Steps communities and partners.

CDC worked to complete materials for pilot testing the Steps core performance measures reporting process.

December 2005

CDC worked to complete materials for pilot testing the Steps core performance measures reporting process.

January 2006

CDC and Steps to a Healthier Colorado conducted a pilot test to assess the reporting process for the Steps Program core performance measures.

February 2006

CDC convened an internal workgroup to address complex, program-wide issues related to implementing the core performance measures. The internal core performance measures workgroup reviewed and prioritized questions that resulted from the pilot testing of the reporting templates.

Steps Program staff and staff from the Behavioral Surveillance Branch finalized special BRFSS reports tailored to the Steps core performance measures.

March 2006

The internal core performance measures workgroup met several times to discuss CPM I-6. The workgroup discussed what guidance to give Steps communities on how to describe the interventions they implemented and the evidence they used as the basis for selecting those interventions.

CDC updated the core performance measures reporting templates on the basis of feedback from the pilot test.

CDC updated the core performance measures matrix to reflect formatting and editing changes made as a result of the pilot test.

April – June 2006

The internal core performance measures workgroup continued to meet to discuss implementing the core performance measures. The workgroup, in collaboration with the Steps Program leadership, confirmed that data submitted on core performance measures would not be used to reduce, rescind, or increase funding for Steps communities.

CDC completed a draft of the guidance document and shared it with members of the Steps community core performance measures workgroup. CDC invited workgroup members to provide feedback on the document.

The fourth Steps Cooperative Agreement Workshop for Steps communities took place June 27-29 in Atlanta, Georgia. CDC presented two sessions on the core performance measures. The first session provided an overview of the core performance measures and their development process; the second was an orientation to the core performance measures reporting process.

July – August 2006

Many members of the Steps community core performance measures workgroup provided verbal or written feedback on the draft core performance measures guidance document.

The internal core performance measures workgroup continued to discuss implementation of core performance measures, and held two meetings with program and evaluation staff. These meetings included an in-depth orientation to the core performance measures reporting process and discussion of how CDC staff can best support Steps communities in reporting on core performance measures. Steps program staff reviewed the draft core performance measures guidance document and provided written feedback.

CDC reviewed all comments and revised the guidance document as needed to respond to comments and recommendations provided by both workgroups.

CDC sent a draft of the core performance measures guidance document (tentatively titled *Core Performance Measures: Documenting the Progress of the Steps to a HealthierUS Cooperative Agreement Program*) and related reporting templates to all Steps communities.

September – November 2006

CDC provided the following technical assistance to Steps communities as they completed the first round of reporting:

- Held a conference call with all Steps communities to answer questions and provide guidance on the reporting process.
- Worked with communities by phone to assist with needs specific to individual communities.
- Created and monitored an email account dedicated solely to core performance measures technical assisstance.

Steps communities submitted core performance measures data by November 22 reporting deadline.

December 2006 – January 2007

CDC held a working retreat to identify and clarify revisions necessary to complete the core performance measures guidance document.

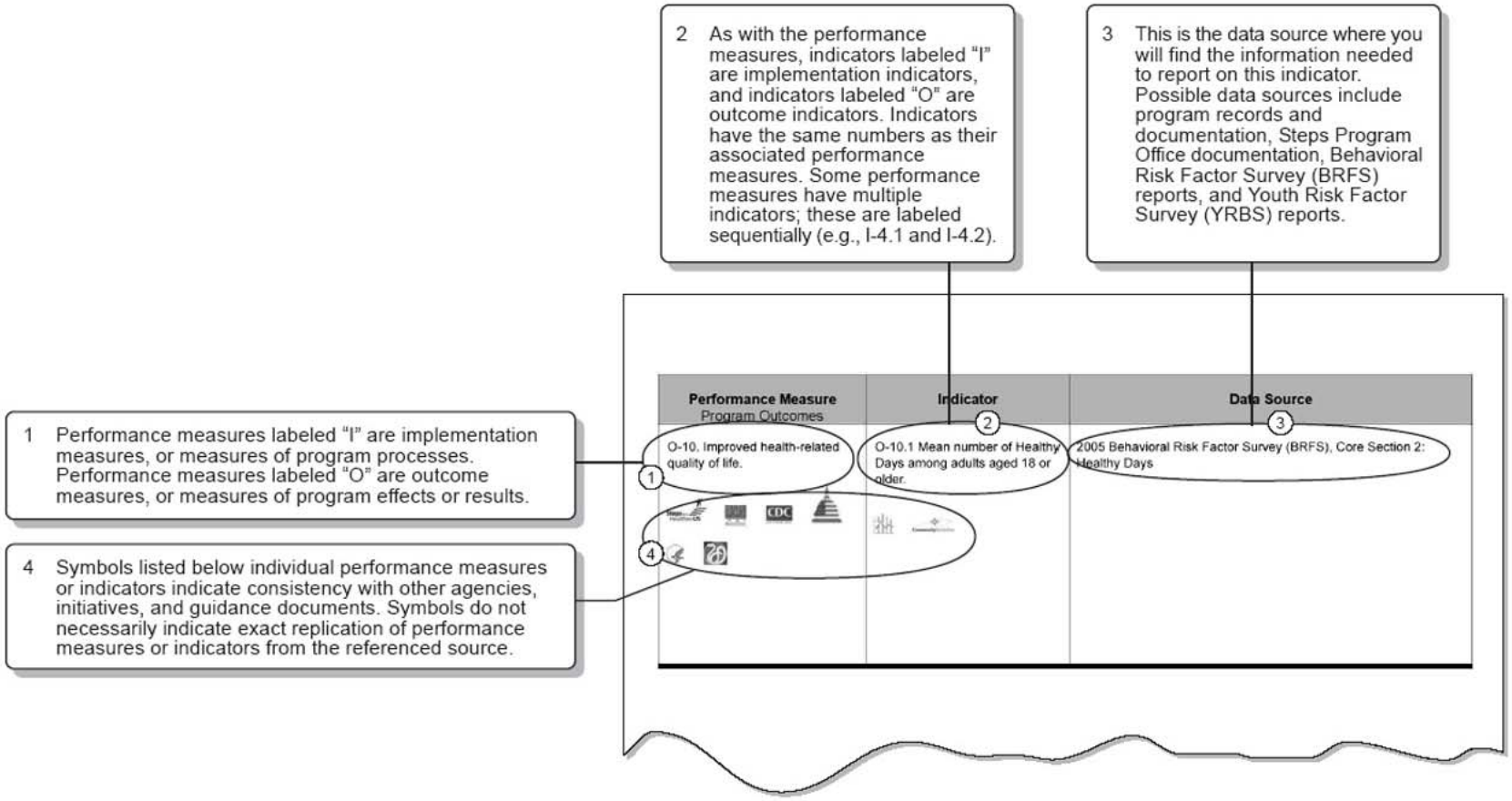
CDC finalized the core performance measures guidance document, *Core Performance Measures: A Systematic Approach to Process and Outcome Evaluation Across the Steps to a HealthierUS Cooperative Agreement Program.*

Appendix B

Core Performance Measures (CPM) Matrix

The purpose of the Core Performance Measures Matrix is to provide Steps communities with a concise overview of information needed for reporting on core performance measures. Indicator definitions and other detailed information is provided in the indicator summaries (Appendix C). The matrix includes performance measures relevant to program implementation and outcomes. For each performance measure, the document includes 1) indicators, and 2) data sources. As appropriate, symbols highlight consistency with relevant guidance or consensus documents.

Map to CPM Matrix



KEY TO SYMBOLS

We use a series of symbols throughout the matrix to indicate consistency with relevant agencies, initiatives, documents, or related assessment processes. Symbols do not necessarily indicate exact replication of performance measures or indicators from the referenced source.

10 Essential Public Health Services http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm	
Agency for Healthcare Research and Quality (AHRQ) National Healthcare Disparities Report National Healthcare Quality Report http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx	
Centers for Disease Control and Prevention (CDC) FY 2005 Performance Plan http://www.cdc.gov/od/perfplan/Index.htm	
The Future of the Public's Health in the 21st Century The Institute of Medicine (IOM) http://www.iom.edu/report.asp?id=4304	
Government Performance and Results Act (GPRA) http://www.whitehouse.gov/omb/mgmt-gpra/index.html	
The Guide to Community Preventive Services http://www.thecommunityguide.org/	
Healthy People 2010 http://www.healthypeople.gov/default.htm	
Indicators for Chronic Disease Surveillance http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf	
National Association of County & City Health Officials http://www.naccho.org/	
National Asthma Education and Prevention Program (NAEPP) http://www.nhlbi.nih.gov/about/naepp/	
Program Assessment Rating Tool (PART) http://www.whitehouse.gov/omb/part/index.html	
Secretary Mike Leavitt's 500-Day Plan http://www.hhs.gov/secretaryspage.html http://www.hhs.gov/500DayPlan/500DayPlan.pdf	
Steps to a HealthierUS Cooperative Agreement Program Announcements 03135, 04134, and 04234 http://www.healthierus.gov/steps/2003grants.html http://www.healthierus.gov/steps/2004grants.html	
The U.S. Preventive Services Task Force (AHRQ) http://www.ahrq.gov/clinic/uspstfix.htm	

Performance Measure Program Implementation	**Indicator**	**Data Source**
I-1. Align the budget with program goals and intended outcomes.	I-1.1. Fiscal resources allocated to address Steps focus areas and key health outcomes.	Steps community program records
I-2. Ensure that community objectives and activities are consistent with and supportive of state plans for the prevention and control of obesity, diabetes, asthma, and associated risk factors, but do not duplicate interventions or activities.	I-2.1. Objectives and activities linked to the work of state programs to prevent and control obesity, diabetes, asthma, or associated risk factors.	Steps community program records
I-3. Expand the resources available to Steps community programs by engaging in public-private ventures and securing foundation grants, other public funding, and in-kind contributions.	I-3.1. Resources secured to supplement funds received via the Steps to a HealthierUS Cooperative Agreement Program.	Steps community program records

Performance Measure Program Implementation	**Indicator**	**Data Source**
I-4. Participate in coordinated monitoring and evaluation activities that include 1) collecting data and reporting on common performance measures and 2) planning and implementing national evaluation activities.	I-4.1. Submission of data on core performance measures according to established schedule.	Steps community program records
	I-4.2. Participation in national-level evaluation tasks (e.g., sending feedback to Steps Program Office (SPO) on draft documents, task-specific workgroups, conference calls).	Steps community program records

Performance Measure Program Implementation	**Indicator**	**Data Source**
I-5. Expand existing surveillance mechanisms to collect representative Behavioral Risk Factor Surveillance System (BRFSS) data on adults annually and representative data from the Youth Risk Behavior Surveillance System (YRBSS) data on high school students every 2 years.	I-5.1. Appropriate and representative data collected via Behavioral Risk Factor Surveillance System.	Behavioral Risk Factor Survey (BRFS) Report
	I-5.2. Appropriate and representative data collected via Youth Risk Behavior Surveillance System.	Youth Risk Behavior Survey (YRBS) Report
I-6. Use multiple, evidence-based public health strategies.	I-6.1. Documented evidence for activities related to all the diseases and risk factors of interest to the Steps Program.	Steps community program records

Performance Measure Program Implementation	**Indicator**	**Data Source**
I-7. Improve integration of program components.	I-7.1. Implementation of 1) interventions that address at least two diseases or risk factors and 2) at least one intervention at each key sector.	Steps community program records
	I-7.2. Implementation of evidenced-based interventions that address access to healthcare, quality of healthcare, and use of healthcare.	Steps community program records
	I-7.3. Implementation of evidenced-based interventions across the socio-ecological model (i.e., individual, interpersonal, organizational, community, and public policy).	Steps community program records
	I-7.4. Partnership with the YMCA of the USA, or its local affiliate, to improve access to places for physical activity.	Steps community program records

Performance Measure Program Implementation	**Indicator**	**Data Source**
	I-7.5. Composition and function of Steps Leadership Team (e.g., inclusion of non-traditional agencies or partners, state or local categorical programs, key community-based organizations, or representatives of the healthcare sector).	Steps community program records
	I-7.6. Composition and function of Steps State-Community Management Team (e.g., inclusion of coordinated Steps communities, non-traditional agencies or partners, state or local categorical programs, key community-based organizations, or representatives of the healthcare sector).	Steps community program records
	I-7.7. Provision of technical assistance to state-coordinated Steps communities (State only).	Steps community program records

Performance Measure Program Implementation	**Indicator**	**Data Source**
I-8. Document that intended populations participate in Steps communities' activities and interventions.	I-8.1. Reach (i.e., service to intervention areas or specific populations identified in community action plan)	Steps community program records

Performance Measure Program Outcome	**Indicator**	**Data Source**
O-1. Increased knowledge and awareness about healthy behaviors such as healthful eating, physical activity, and avoiding tobacco use.	Knowledge of physical activity recommendations (moderate and vigorous) among adults [Recommended]	Community-specific data sources
	Knowledge of physical activity recommendations among youth [Recommended]	Community-specific data sources
	Knowledge of recommended fruit and vegetable consumption among adults [Recommended]	Community-specific data sources

Performance Measure Program Outcome	**Indicator**	**Data Source**
	Knowledge of recommended fruit and vegetable consumption among youth [Recommended]	Community-specific data sources
	Proportion of students who would ever wear or use something with a tobacco company name or picture [Recommended]	Community-specific data sources
	Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke [Recommended]	Community-specific data sources
	Proportion of adult smokers who intend to quit [Recommended] 	Community-specific data sources
	Proportion of youth smokers who intend to quit [Recommended] 	Community-specific data sources

Performance Measure Program Outcome	**Indicator**	**Data Source**
O-2. Increased knowledge about getting appropriate preventive screenings.	Community-specific indicators	Community-specific data sources
O-3. Increased physical activity and healthful eating for children and adults.	O-3.1. Fruit and vegetable consumption among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 17: Fruits and Vegetables
	O-3.2. Fruit and vegetable consumption among youth	2007 Youth Risk Behavior Survey (YRBS) Food Section
	O-3.3. Recommended physical activity among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 18: Physical Activity
	O-3.4. Recommended physical activity among youth	2007 Youth Risk Behavior Survey (YRBS), Physical Activity Section

Performance Measure Program Outcome	**Indicator**	**Data Source**
	O-3.5. Television viewing among youth	2007 Youth Risk Behavior Survey (YRBS), Physical Activity Section
O-4. Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.	O-4.1. Health care access	2005 Behavioral Risk Factor Survey (BRFS), Core Section 3: Health Care Access
	O-4.2. Foot examination among adults aged 18 or older with diabetes	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes, Module 1: Diabetes
	O-4.3. Dilated eye examination among adults aged 18 or older with diabetes	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes, Module 1: Diabetes
	O-4.4. Glycosylated hemoglobin measurement at least twice a year among adults aged 18 or older with diabetes	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes, Module 1: Diabetes

Performance Measure Program Outcome	**Indicator**	**Data Source**
	O-4.5. Adults with asthma aged 18 or older receiving routine checkups for asthma	2005 Behavioral Risk Factor Survey (BRFS), Core Section 9: Asthma, Module 9: Adult Asthma History
	O-4.6. Adult smokers aged 18 or older advised by health care provider to quit smoking	2005 Behavioral Risk Factor Survey (BRFS), Core Section 11: Tobacco Use, Module 21: Smoking Cessation
	O-4.7. Tobacco use cessation attempts by adolescent smokers	2007 Youth Risk Behavior Survey (YRBS), Tobacco Use Section

Performance Measure Program Outcome	**Indicator**	**Data Source**
O-5. Increased identification of persons with pre-diabetes and diabetes.	O-5.1. Reduce the overall rate of diabetes that is clinically diagnosed among adults	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes
	O-5.2. Reduce the overall rate of diabetes that is clinically diagnosed among youth	2007 Steps Youth Risk Behavior Survey (Steps YRBS)
O-6. Improved self-management of diabetes and asthma.	O-6.1. Self blood-glucose monitoring among adults aged 18 or older with diabetes	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes, Module 1: Diabetes
	O-6.2. Self foot exam among adults aged 18 or older with diabetes	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes, Module 1: Diabetes
	O-6.3. Symptom-free days among adults aged 18 or older with asthma	2005 Behavioral Risk Factor Survey (BRFS), Core Section 9: Asthma, Module 9: Adult Asthma History

Performance Measure Program Outcome	**Indicator**	**Data Source**
O-7. Measurable improvements in healthful eating, physical activity, and tobacco use.	Indicators include O-3.1 – O-3.5 in addition to those below	
	O-7.1. Tobacco use cessation attempts by adult smokers	2005 Behavioral Risk Factor Survey (BRFS), Core Section 11: Tobacco Use
	O-7.2. Tobacco use cessation attempts by adolescent smokers	2007 Youth Risk Behavior Survey (YRBS), Tobacco Use Section
	O-7.3. Cigarette smoking among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 11: Tobacco Use
	O-7.4. Cigarette smoking among youth	2007 Youth Risk Behavior Survey (YRBS), Tobacco Use Section

Performance Measure Program Outcome	**Indicator**	**Data Source**
O-8. Slowed upward trend of overweight and obesity in Steps communities.	O-8.1. Prevalence of overweight or obesity among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 13: Demographics
	O-8.2. Obesity prevalence among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 13: Demographics
	O-8.3. Overweight prevalence among youth	2007 Youth Risk Behavior Survey (YRBS), Demographics Section
O-9. Reduced hospitalizations due to diabetes complications and asthma exacerbations.	O-9.1. Hospitalization with asthma among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 9: Asthma, Module 9: Adult Asthma History
	O-9.2. Hospitalization with asthma among youth	2007 Steps Youth Risk Behavior Survey (Steps YRBS)

Performance Measure Program Outcome	**Indicator**	**Data Source**
	O-9.3. Hospitalization with diabetes among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 5: Diabetes, Module 1: Diabetes
O-10. Improved health-related quality of life.	O-10.1 Mean number of Healthy Days among adults aged 18 or older	2005 Behavioral Risk Factor Survey (BRFS), Core Section 2: Healthy Days

Appendix C

Indicator Summaries

These indicator summaries provide clear and comprehensive measurement definitions for each indicator. Additionally, they contain information about the rationale for selecting each indicator, intended use of data collected on the indicator, frequency of data collection, and consistency with relevant agencies, initiatives, and guidance documents. The appendix begins with a map that explains the layout and content of the indicator summaries.

Map to Indicator Summaries

1 Performance Measures labeled "I" are implementation measures, or measures of program processes. Performance Measures labeled "O" are outcome measures, or measures of program effects or results.

2 As with the performance measures, indicators labeled "I" are implementation indicators, and indicators labeled "O" are outcome indicators. Indicators have the same numbers as their associated performance measures. Some performance measures have multiple indicators; these are labeled sequentially (e.g., I-4.1 and I-4.2).

3 The rationale for each indicator explains the significance of the indicator within the Steps Program foundation or theory.

4 The primary intended use of the core performance measures is to demonstrate that resources allocated to the Steps Program are accounted for and used wisely. This section explains how each indicator will be used to demonstrate accountability for program resources. This section also describes additional uses of these data by Steps communities, CDC, and other public health programs.

5 The data source tells you where you will find the information needed to report on this indicator. Possible data sources include program records and documentation, Behavioral Risk Factor Survey (BRFS) reports, and Youth Risk Factor Survey (YRBS) reports.

6 This section explains how the indicator is measured. For implementation indicators, it states what specific information is required to report on the indicator. For outcome indicators, it provides the numerator and denominator.

7 The numerator is the top part of a fraction used to calculate a ratio or percentage. Taken with the denominator, it explains how the general concept identified in the indicator will be measured. The numerator specifies the criteria needed in order to meet this indicator.

8 The denominator is the bottom part of a fraction used to calculate a ratio or percentage. Taken with the numerator, it explains how the general concept identified in the indicator will be measured. The denominator specifies the population of interest, or all people surveyed who could possibly meet the criteria for this indicator and be part of the numerator.

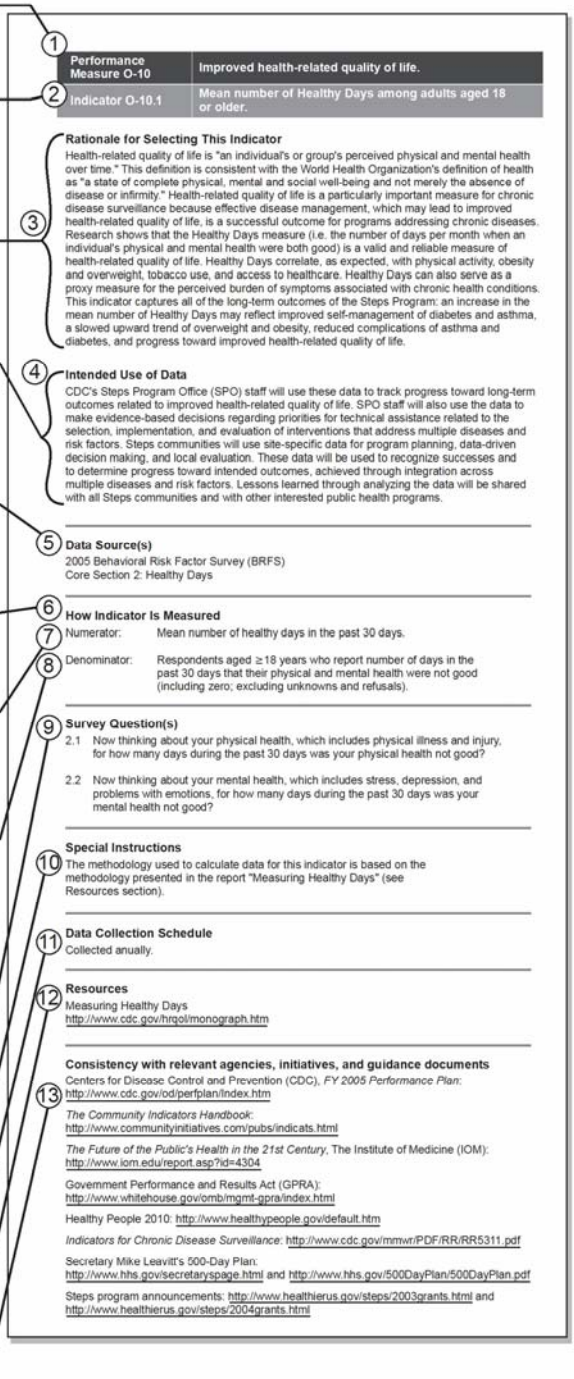
9 Survey questions are the specific questions that must be asked in order to report on this indicator. These questions are taken from the instrument listed in the data sources section. This section is only included for outcome measures.

10 The special instructions provide any additional information needed to understand or collect data for this indicator.

11 The data collection schedule section states how often communities will collect data on the indicator and report the data to the Steps Program Office (SPO).

12 Relevant resources are listed here, as applicable, to provide additional information or further reading.

13 This section lists agencies, initiatives, and guidance documents with which the indicator is consistent. Consistency does not necessarily indicate exact replication of performance measures or indicators from the referenced source.



Performance Measure O-10	Improved health-related quality of life.
Indicator O-10.1	Mean number of Healthy Days among adults aged 18 or older.

Rationale for Selecting This Indicator

Health-related quality of life is "an individual's or group's perceived physical and mental health over time." This definition is consistent with the World Health Organization's definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Health-related quality of life is a particularly important measure for chronic disease surveillance because effective disease management, which may lead to improved health-related quality of life, is a successful outcome for programs addressing chronic diseases. Research shows that the Healthy Days measure (i.e. the number of days per month when an individual's physical and mental health were both good) is a valid and reliable measure of health-related quality of life. Healthy Days correlate, as expected, with physical activity, obesity and overweight, tobacco use, and access to healthcare. Healthy Days can also serve as a proxy measure for the perceived burden of symptoms associated with chronic health conditions. This indicator captures all of the long-term outcomes of the Steps Program: an increase in the mean number of Healthy Days may reflect improved self-management of diabetes and asthma, a slowed upward trend of overweight and obesity, reduced complications of asthma and diabetes, and progress toward improved health-related quality of life.

Intended Use of Data

CDC's Steps Program Office (SPO) staff will use these data to track progress toward long-term outcomes related to improved health-related quality of life. SPO staff will also use the data to make evidence-based decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions that address multiple diseases and risk factors. Steps communities will use site-specific data for program planning, data-driven decision making, and local evaluation. These data will be used to recognize successes and to determine progress toward intended outcomes, achieved through integration across multiple diseases and risk factors. Lessons learned through analyzing the data will be shared with all Steps communities and with other interested public health programs.

Data Source(s)

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 2: Healthy Days

How Indicator Is Measured

Numerator: Mean number of healthy days in the past 30 days.

Denominator: Respondents aged ≥18 years who report number of days in the past 30 days that their physical and mental health were not good (including zero; excluding unknowns and refusals).

Survey Question(s)

2.1 Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

2.2 Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Special Instructions

The methodology used to calculate data for this indicator is based on the methodology presented in the report "Measuring Healthy Days" (see Resources section).

Data Collection Schedule

Collected anually.

Resources

Measuring Healthy Days
http://www.cdc.gov/hrqol/monograph.htm

Consistency with relevant agencies, initiatives, and guidance documents

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*:
http://www.cdc.gov/od/perfplan/index.htm

The Community Indicators Handbook:
http://www.communityinitiatives.com/pubs/indicats.html

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM):
http://www.iom.edu/report.asp?id=4304

Government Performance and Results Act (GPRA):
http://www.whitehouse.gov/omb/mgmt-gpra/index.html

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan:
http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps program announcements: http://www.healthierus.gov/steps/2003grants.html and
http://www.healthierus.gov/steps/2004grants.html

Performance	Align the budget with program goals and intended
Indicator I-1.1	Fiscal resources allocated to address Steps focus areas

Rationale for Selecting This Indicator

A performance budget, or activity-based budget, is a performance plan that shows the relationship between allocated funds, program activities, and expected results.[1] These budgets show how programs use funds for certain activities, how those activities are expected to generate certain outputs, and how those outputs should lead to intended outcomes. Performance budgets allow programs to demonstrate that fiscal resources are allocated to address program focus areas and intended health outcomes.

With growing competition for limited resources, the federal government is increasingly interested in having programs account for the federal dollars they spend.[2] The Program Assessment Rating Tool (PART) is the primary assessment tool that the Federal government uses to improve program performance so that it can achieve better results.[3] This performance measure and indicator are consistent with a PART budget question and with the government's general move toward performance budgeting.[3]

Linking budget to performance by using an activity-based budget is a core element of the Steps Program. Documenting that Steps communities use activity-based budgets is an important component of demonstrating accountability for how federal dollars are spent.

Intended Use of Data

Documenting that they submit activity-based budgets shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of effective performance budgets and to share lessons learned about linking fiscal resources to program focus areas and key health outcomes with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A statement that an activity-based budget form was (or was not) submitted to CDC.
- The date the activity-based budget form was submitted.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Mercer J. Performance budgeting for federal agencies (Fairfax: AMS, 2002). Available at http://www.john-mercer.com/library/Performance_Budgeting_FA.pdf.

[2] GAO. *21st Century challenges: performance budgeting could help promote necessary reexamination.* (Publication Number GAO-05-709T). Washington, D.C.: GAO; 2005. Available at: http://www.gao.gov/new.items/d05709t.pdf

[3] OMB. *Program assessment rating tool (PART)* [online]. 2006. Available at http://www.whitehouse.gov/omb/part/ .

Performance	Ensure that community objectives and activities are
Indicator I-2.1	Objectives and activities linked to the work of state

Rationale for Selecting This Indicator

Coordinating national, state, and local public health activities and programs is vital, as evidenced by this statement from the Institute of Medicine:

> An effective public health system that can assure the nation's health requires the collaborative efforts of a complex network of people and organizations in the public and private sectors, as well as an alignment of policy and practice of governmental public health agencies at the national, state, and local levels."[1]

CDC supports state programs that promote healthy behaviors and reduce risk for disease, including programs that address all the diseases and risk factors targeted by the Steps Program.[2,3] Furthermore, CDC recommends that state health departments develop plans that describe the health problems they will address, how they will address those problems, and how program activities will be funded and evaluated.[4]

Programs funded through the Steps cooperative agreement are required to coordinate with and reinforce, but not duplicate, related federal, state, and local activities. By coordinating with state and local programs, communities can maximize resources, reduce duplication of services, and ensure that their efforts complement state categorical programs and increase their effect on health outcomes. The Program Assessment Rating Tool (PART) is the primary assessment tool that the Federal government uses to improve program performance so that the government can achieve better results. [5] This performance measure and indicator are consistent with a PART question that pertains to reducing the number of programs that duplicate other federal, state, local government, or private programs.[3]

Intended Use of Data

Documenting that they coordinate their activities with those of state and local programs shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of community activities that are linked with related state activities and to share lessons learned about such collaborations with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- Whether or not there is a state plan for each Steps focus area.
- Whether or not the state receives federal dollars other than funds from the Steps Program for each focus area.
- A short description of how Steps community program objectives or activities are consistent with state plans for each Steps focus area (if applicable).
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Institute of Medicine. The future of the public's health in the 21st century. National Academies Press. p. 96. November 2002.
[2] CDC. State Programs in Action. Exemplary Work to Prevent Chronic Disease and Promote Health. Atlanta: U.S. Department of Health and Human Services; 2005. Available at http://www.cdc.gov/nccdphp/publications/Exemplary.
[3] CDC. National Asthma Control Program Grantees and Nonfunded Asthma Contacts. Available at http://www.cdc.gov/asthma/contacts/default.htm.
[4] CDC. Promising practices in chronic disease prevention and control: a public health framework for action. Atlanta, GA: Department of Health and Human Services, 2003.
[5] OMB. *Program assessment rating tool (PART)* [online]. 2006. Available at http://www.whitehouse.gov/omb/part/ .

Performance	Expand the resources available to Steps community
Indicator I-3.1	Resources secured to supplement funds received via the

Rationale for Selecting This Indicator

Mobilizing community members or organizations to help with a public health program is one of twelve best practices for improving communities.[1] Doing so ensures that enough people are available to plan, implement, adapt, and run program activities and events. Generating resources (financial and human) is a critical part of community mobilization.

The Steps Program announcements require matching funds from non-Federal sources for large cities and urban communities and state-coordinated small cities and rural communities funded in 2004. The program announcements encourage, but do not require, matching funds for Tribes and Tribal entities funded in 2004 and for all communities funded in 2003. Matching funds (whether cash, in-kind, or donated services) extend the program's reach and service capacity and play a role in building relationships between communities and their key partners.

Intended Use of Data

Documenting that supplemental resources were secured shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of supplemental funding or in-kind contributions generated by communities and to share lessons learned about securing such resources with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- Name of each organization that provided support.
- A short description of any direct funding provided, including why it was provided or how it was used.
- A short description of any in-kind labor provided, including why it was provided or how it was used.
- A short description of any other type of contribution (e.g., free meeting space, printing services).
- Approximate value in dollars of each type of contribution.
- Any contextual information or supplemental data that further explains or supports the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Work Group for Community Health and Development at the University of Kansas. *Community tool box: best processes and practices that promote community change and improvement* [online]. 2006. Available at: http://ctb.ku.edu/tools/bp/en/tools_bp_6.jsp.

Implementation	**Participate in coordinated monitoring and evaluation activities that include 1) collecting data and reporting on common performance measures and 2) planning and implementing national evaluation activities.**
Indicator I-4.1	**Submission of data on core performance measures according to established schedule.**

Rationale for Selecting This Indicator

The core performance measures are the heart of the national evaluation and are an essential component of data-based decision making throughout the entire Steps Program. Across Steps communities, program evaluation uses a set of standard measures that are consistent with those of other federal programs and guidance documents. The core performance measures include both implementation and outcome measures so that we can generate knowledge about *how* programs achieve outcomes as well as *what* outcomes are achieved.

One of the core requirements for Steps communities is data collection and reporting on performance measures. The Program Assessment Rating Tool (PART) is the primary assessment tool that the Federal government uses to improve program performance so that it can achieve better results.[1] This performance measure and indicator are consistent with a PART question concerned with the collection of timely and credible performance data.[1] Obtaining timely, systematic, multi-site data allows the Centers for Disease Control and Prevention (CDC) to measure whether communities implemented required elements and how much progress they made toward intended outcomes. In addition, we can see how outcome data from each community compares with state and national data.

Intended Use of Data

Documenting submission of data on core performance measures shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. CDC uses data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of performance measurement and to share lessons learned about implementing and evaluating programs—specifically measuring program processes and progress toward intended outcomes—with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A statement of whether or not data are submitted on each indicator.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] OMB. *Program assessment rating tool (PART)* [online]. 2006. Available at http://www.whitehouse.gov/omb/part/

Implementation Measure I-4	**Participate in coordinated monitoring and evaluation activities that include 1) collecting data and reporting on common performance measures and 2) planning and implementing national evaluation activities.**
Indicator I-4.2	**Participation in national evaluation tasks (e.g., sending feedback to Steps Program Office (SPO) on draft documents, task-specific workgroups, conference calls).**

Rationale for Selecting This Indicator

Evaluation is one of the essential public health services set forth by the National Public Health Performance Standards Program.[1] For a successful evaluation, stakeholder engagement is critical. Stakeholders are "the persons or organizations having an investment in what will be learned from an evaluation and what will be done with the knowledge."[2] Steps communities are key stakeholders in the national evaluation of the Steps Program. Stakeholder engagement ensures that stakeholders' perspectives are understood, and it minimizes the likelihood that evaluation findings will be ignored, criticized, or resisted because they do not address the stakeholders' needs or values.[2]

Participation in national evaluation planning and implementation is a core requirement of the program. By involving Steps communities, the program ensures that the national evaluation meets the needs and realities of communities, captures their diverse experiences, and considers situations from their perspectives.

Intended Use of Data

Documenting their participation in national evaluation tasks shows that Steps communities fulfilled a core requirement of the program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program, to generate knowledge that will shape and strengthen future evaluation, and to promote collaboration on evaluation among the communities and between communities and CDC. CDC also uses this information to disseminate examples of community participation in the national Steps Program evaluation and to share lessons learned about program evaluation—specifically conducting multisite evaluations—with all communities and with other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- Examples of how they participated in national program evaluation.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National public health performance standards program: The essential public health services* [online]. Available at http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

[2] CDC. Framework for program evaluation in public health. MMRW 1999;48(No. RR-11. US Department of Health and Human Services.

Implementation Measure I-5	**Expand existing surveillance mechanisms to collect representative Behavioral Risk Factor Surveillance System (BRFSS) data on adults annually and representative data from the Youth Risk Behavior Surveillance System (YRBSS) on high school students every two years.**
Indicator I-5.1	**Appropriate and representative data collected via Behavioral Risk Factor Surveillance System.**

Rationale for Selecting This Indicator

The use of surveillance data for planning and evaluation ensures the highest quality information for accountability and program improvement across multi-site programs. Using existing surveillance systems allows programs to maximize resources and increase consistency in measurement.[1] The Behavioral Risk Factor Surveillance System (BRFSS) is the primary source of information on lifestyle risk factors that contribute to the leading causes of death and chronic disease in the United States; the BRFSS is used by all 50 states, the District of Columbia, and three territories. Using this surveillance system allows Steps communities to maximize resources and enhance comparability of their data with those of the nation, state, and selected local areas. Data collection via the BRFSS generates timely, community-level data about relevant risk factors and behaviors and is the key source of information about Steps Program outcomes among adults.

Communities are required to expand existing surveillance mechanisms and collect representative data on factors of interest to the program. Investing in the annual collection of chronic disease surveillance data via the BRFSS demonstrates enhanced capacity for public health practice at the local level and serves as an example of community-level surveillance. Moreover, expanding disease and risk factor surveillance to the community level is a primary expected achievement of the program; such an expansion should improve community planning for health promotion activities.

Intended Use of Data

Documenting data collection via the BRFSS shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted for this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of participation in surveillance systems at the local level and to share lessons learned about disease and risk factor surveillance with all Steps communities and interested public health programs.

Data Source

Behavioral Risk Factor Survey (BRFS) Report

How Indicator is Measured

Steps communities send CDC the following data:

- A statement that that they participated (or did not participate) in the BRFSS.
- The number of completed surveys.
- A statement that their BRFS data was (or was not) weighted.
- A description of any deviations from standard surveillance data collection procedures.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

National Association of County & City Health Officials: http://www.naccho.org/

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] MacDonald G, Garcia D, Zaza S, Schooley M, Compton D, Bryant T, et al. Steps to a HealthierUS Cooperative Agreement Program: foundational elements for program evaluation planning, implementation, and use of findings. Preventing Chronic Disease [serial online] 2006 Jan. Available from: http://www.cdc.gov/PCD/issues/2006/jan/05_0136.htm

Implementation Measure I-5	**Expand existing surveillance mechanisms to collect representative Behavioral Risk Factor Surveillance System (BRFSS) data on adults annually and representative data from the Youth Risk Behavior Surveillance System (YRBSS) on high school students every two years.**
Indicator I-5.2	**Appropriate and representative data collected via Youth Risk Behavior Surveillance System.**

Rationale for Selecting This Indicator

The use of surveillance data for planning and evaluation ensures the highest quality information for accountability and program improvement across multi-site programs. Using existing surveillance systems allows programs to maximize resources and increase consistency in measurement. [1] The Youth Risk Behavior Surveillance System (YRBSS) is widely used to monitor priority health-risk behaviors that contribute to the leading causes of death, disability, and social problems among young people and adults in the United States: in 2005, 44 states and 23 large urban school districts participated. In addition, 22 of the 24 Steps communities funded in 2003 participated in the 2005 YRBSS. Communities funded in 2003 and 2004 will participate in the 2007 YRBSS. Data collection via the YRBSS generates timely, community-level data about relevant risk factors and behaviors and is the key source of information about Steps Program outcomes among young people.

Communities are required to expand existing surveillance mechanisms and collect representative data on factors of interest to the program. Investing in the biennial collection of chronic disease surveillance data via the YRBSS demonstrates enhanced capacity for public health practice at the local level and serves as an example of community-level surveillance. Moreover, expanding disease and risk factor surveillance to the community level is a primary expected achievement of the program; such an expansion should improve community planning for health promotion activities.

Intended Use of Data

Documenting data collection via the YRBSS shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted for this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of participation in surveillance systems at the local level and to share lessons learned about disease and risk factor surveillance with all Steps communities and interested public health programs.

Data Source

Youth Risk Behavior Survey (YRBS) Report

How Indicator is Measured

Steps communities send CDC the following data:

- A statement that that they participated (or did not participate) in the YRBSS.
- The number of completed surveys.
- A statement that their YRBS data was (or was not) weighted.
- A description of any deviations from standard surveillance data collection procedures and whether parental consent was active or passive.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

National Association of County & City Health Officials: http://www.naccho.org/

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] MacDonald G, Garcia D, Zaza S, Schooley M, Compton D, Bryant T, et al. Steps to a HealthierUS Cooperative Agreement Program: Foundational elements for program evaluation planning, implementation, and use of findings. *Preventing Chronic Diseases* [online]. 2006. Available at: http://www.cdc.gov/pcd/issues/2006/jan/05_0136.htm

Performance Measure I-6	Use multiple, evidence-based public health strategies.
Indicator I-6.1	**Documented evidence for activities related to all the diseases and risk factors of interest to the Steps Program.**

Rationale for Selecting This Indicator

This is the single most important performance measure and is the theoretical foundation for the Steps Program. Evidence-based public health is the process of using evidence-based interventions that are compatible with community preferences in order to improve the health of populations. [1,2] The evidence base for interventions may include scientific evidence from a wide range of disciplines and/or practice-based wisdom.[1,2] By implementing evidence-based strategies, Steps communities focus their efforts on the most effective interventions and demonstrate that funds are being used in the best way possible to reduce the burden of chronic disease in their communities.

Implementing evidence-based interventions to address all Steps focus areas (i.e. obesity, diabetes, asthma, poor nutrition, physical inactivity, and tobacco use) is a required element of the program. Communities are required to rely on current knowledge of what works in chronic disease prevention and health promotion in order to ensure progress toward intended outcomes. In doing so, communities draw from a wide range of sources of evidence. Using evidence-based strategies allows communities to increase their knowledge and begin implementing interventions with a minimum of time devoted to program planning.

Intended Use of Data

Documenting that interventions are evidence-based shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information 1) to disseminate examples of the range of evidence available to support evidence-based chronic disease prevention and health promotion programs and 2) to share lessons learned about selecting and implementing evidence-based interventions with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A list of each intervention.
- The source of evidence for each intervention.
- An indication of which Steps Program focus areas (i.e. obesity, diabetes, asthma, nutrition, physical activity, and tobacco use) each intervention addresses.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

Steps communities can draw from a wide range of evidence, including systematic reviews, published studies, unpublished studies, expert opinions, and practice-based wisdom.

Data Collection Schedules

Collected annually

Resources

Appendix G lists sources of evidence relevant to Steps interventions. It is an optional tool that Steps communities may use to show the evidence base for selected interventions. This list is not exhaustive or prescriptive, and Steps communities are not limited to the sources on this list.

Consistency with relevant agencies, initiatives, and guidance documents

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

National Association of County & City Health Officials: http://www.naccho.org/

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

The U.S. Preventive Services Task Force (AHRQ): http://www.ahrq.gov/clinic/uspstfix.htm

[1] Brownson R, Gurney J, & Land G. Evidence based decision making in public health. *Journal of Public Health Management Practice.* 1999;5(5):86-97.

[2] Kohatsu N, Robinson J, & Torner J. Evidence-based public health: an evolving concept. *American Journal of Preventive Medicine*. 2004;27(5): 417-21.

Performance Measure I-7	Improve integration of program components.
Indicator I-7.1	Implementation of 1) interventions that address at least two diseases or risk factors and 2) at least one intervention at each key sector.

Rationale for Selecting This Indicator

The Institute of Medicine (IOM) calls for chronic disease management programs to address "all of the leading chronic disease conditions that affect the population being served." [1] The integration of chronic disease intervention activities is a process of coordinating programs and activities to prevent multiple chronic diseases and reduce related risk factors. Steps community programs implement interventions that cut across multiple chronic diseases and their associated risk factors in order to increase their effect on disease rates and the overall health of the population, to create awareness of the shared aims of most chronic disease prevention programs, and to facilitate more effective solving of persistent problems. [2] In addition, an integrated approach improves efficiency and cost effectiveness and reduces duplication.[2]

Community entities such as schools, volunteer organizations, religious congregations, businesses, and the media all have a role to play in shaping the public's health. Indeed, the IOM identifies "communities and their many entities (e.g., schools, organizations, and religious congregations), businesses and employers, and the media as potential actors in the public health system."[3] Steps community programs implement interventions in a number of key sectors, including the following: healthcare settings, schools, workplaces, and the community.

Implementing interventions that address two or more of the Steps focus areas (i.e. obesity, diabetes, asthma, poor nutrition, physical inactivity, and tobacco use) and implementing interventions in all key sectors are required elements of the program. This integrated approach to disease prevention and health promotion distinguishes the program from categorical approaches to disease prevention and risk reduction. Implementing crosscutting interventions allows communities to maximize their resources and create synergies at the state and local level to spur progress toward intended outcomes.

Intended Use of Data

Documenting implementation of 1) interventions that address at least two diseases or risk factors and 2) at least one intervention at each key sector shows that Steps communities fulfilled core requirements of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC also uses this information to disseminate examples of crosscutting chronic disease prevention and health promotion interventions and to share lessons learned about implementing such interventions with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A list of each intervention.
- An indication of which Steps Program focus areas (i.e. obesity, diabetes, asthma, poor nutrition, physical inactivity, and tobacco use) each intervention addresses.
- An indication of which Steps Program key sectors (i.e. healthcare access, quality, and use; schools; workplace; community) each intervention addresses.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] IOM. *Fostering rapid advances in health care: leaning from system demonstrations*. Washington, DC: The National Academies Press; 2002. Available at: http://www.nap.edu/catalog/10565.html.

[2] Partnership for Prevention and National Association of Chronic Disease Directors. *Comprehensive and integrated chronic disease prevention: action planning handbook for states and communities, version 2.0* [online]. 2005. Available from: http://www.prevent.org/images/stories//action_planning_handbook.pdf

[3] IOM. *The future of the public's health in the 21st century*. Washington, DC: The National Academies Press; 2003. Available at: http://www.iom.edu/CMS/3793/4720/4304.aspx.

Performance Measure I-7	Improve integration of program components.
Indicator I-7.2	Implementation of evidenced-based interventions that address access to healthcare, quality of healthcare, and use of healthcare.

Rationale for Selecting This Indicator

In the United States, population health and individual access to quality healthcare are inextricably linked; according to the Institute of Medicine, "adequate population health cannot be achieved without making comprehensive and affordable health care available to every person residing in the United States." [1] Interventions to improve access to healthcare, quality of healthcare, and use of the healthcare system are therefore important components of population-based chronic disease prevention and health promotion. For example, *The Guide to Community Preventive Services* recommends healthcare system interventions in several areas, including tobacco use cessation, diabetes disease management, and diabetes self management. [2]

Implementation of evidence-based interventions that improve healthcare access, quality, and use is a required element of the Steps Program. By integrating public health services and clinical services and by having public health professionals partner with clinical health professionals, Steps communities increase access to healthcare and improve the quality of care for people in their intervention areas. This provides access to the range of resources essential for chronic disease prevention and health promotion.

Intended Use of Data

Documenting implementation of evidence-based interventions that improve access to healthcare, quality of healthcare, and use of healthcare shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the program. CDC uses this information to disseminate examples of chronic disease prevention and health promotion interventions to improve access to healthcare, quality of healthcare, and use of the healthcare system. In addition, CDC shares lessons learned about implementing those interventions with all Steps communities and with other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A list of each intervention.
- The source of evidence for each intervention.
- An indication of which interventions address healthcare access, quality, and use.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Data Collection Schedules

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] IOM. *The future of the public's health in the 21st century*. Washington, DC: The National Academies Press; 2003. Available at: http://www.iom.edu/CMS/3793/4720/4304.aspx

[2] Zaza S, Bris PA, Harris KW (eds). *Guide to community preventive services: what works to promote health*. Task Force on Community Preventive Services. New York, NY: Oxford University Press; 2005.

Performance Measure I-7	Improve integration of program components.
Indicator I-7.3	Implementation of evidence-based interventions across the socio-ecological model (i.e., individual, interpersonal, organizational, community, and public policy).

Rationale for Selecting This Indicator

Community entities such as schools, volunteer organizations, religious congregations, businesses, and the media all have a role to play in shaping the public's health. Indeed, the Institute of Medicine calls for "adopting a population health approach that considers the multiple determinants of health." [1] One such approach is the ecological perspective, which emphasizes the interaction between, and interdependence of, factors within and across all levels of a health problem. [2] The socio-ecological model identifies five levels of influence for health-related behaviors and conditions: individual, interpersonal, organizational, community, and public policy. [3] By targeting factors that influence health at all five of these levels, programs can have a greater effect on individual and population health than if they focus on only one or a few of these levels.

Implementing evidence-based interventions across the socio-ecological model is a core element of the Steps Program. Recognizing the contributions of individual, social, and environmental influences to the diseases and risk factors targeted by the program, Steps communities use interventions that focus on all five levels of the socio-ecological model.

Intended Use of Data

Documenting that evidence-based interventions were implemented across the socio-ecological model shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the Steps Program. CDC also uses this information to disseminate examples of interventions at all levels of the socio-ecological model and to share lessons learned about implementing those interventions with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A list of each intervention.
- The source of evidence for each intervention.
- An indication of which level(s) of the socio-ecologic model (i.e., individual, interpersonal, organizational, community, and public policy) each intervention addresses.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

In general terms, individual-level interventions target the characteristics of individuals (e.g., their knowledge, attitudes, behavior, and skills). At the interpersonal level, interventions target social norms and influences within formal and informal networks, including families, work groups, and friendship networks. Interventions at the organizational level target rules and regulations, management support (or lack of support) for certain activities, work structures, workplace policies, and the institutionalization of programs. Community-level interventions promote coordination among agencies, coalition-building, and increased access for residents of Steps communities to community power structures. Interventions at the public policy level seek to affect local, state, or national laws and policies.

Interventions may target more than one socio-ecological level. For example, a walking program may target changes at the individual level (e.g., knowledge and awareness), the interpersonal level (e.g., social norms), and the community or organizational level (e.g., access to places for physical activity).

Data Collection Schedule

Collected annually

Resources

McLeroy, K., Bibeau, D., Steckler, A., & Glanz, K. (1988). An Ecological perspective on health promotion programs. Health Education Quarterly, 15, 351-377.

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] IOM. *The future of the public's health in the 21st century*. Washington, DC: The National Academies Press; 2003. Available at: http://www.iom.edu/CMS/3793/4720/4304.aspx.

[2] National Cancer Institute. Theory at a glance: a guide for health promotion practice,2nd edition. NIH (NIH Publication No. 05-3896); 2005. Available at: https://cissecure.nci.nih.gov/ncipubs/details.asp?pid=1302.

[3] McLeroy KR, Bigeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. *Health Education Quarterly*. 1988;15(4): 351-377.

Implementation Measure I-7	Improve integration of program components.
Indicator I-7.4	**Partnership with the YMCA of the USA, or local affiliate, to improve access to places for physical activity.**

Rationale for Selecting This Indicator

Physical inactivity is a primary cause of overweight and obesity, and physical activity can reduce the risk of a wide variety of chronic and acute illnesses. *The Guide to Community Preventive Services* strongly recommends increasing access to places for physical activity as a successful strategy for improving physical activity levels. [1] Collectively, YMCAs are the largest not-for-profit community service organization in the United States.[2] In 2004, the YMCA of the USA received $4 million to support and enhance chronic disease prevention and health promotion in Steps communities. The YMCA of the USA distributed this money to local affiliates to strengthen cooperative efforts with Steps communities to improve access to places for physical activity.

Intended Use of Data

Documenting that they work with the YMCA, or a local affiliate, to improve access to places for physical activity shows that Steps communities partnered with the YMCA as intended by Steps Program Announcement 04134.[3] Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the Steps Program. CDC also uses this information to disseminate examples of collaboration between communities and local YMCA affiliates and to share lessons learned about improving access to physical activity with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- Whether or not there is a local affiliate of the YMCA in their community.
- Whether or not the local affiliate was funded by YMCA of the USA to support Steps activities.
- Examples of how the Steps community is working with the local YMCA affiliate to improve access to places for physical activity.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

National Association of County & City Health Officials: http://www.naccho.org/

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html http://www.healthierus.gov/steps/2004grants.html and http://edocket.access.gpo.gov/2003/03-26628.htm

[1] Zaza S, Bris PA, Harris KW (eds). *Guide to community preventive services: what works to promote health*. Task Force on Community Preventive Services. New York, NY: Oxford University Press; 2005.
[2] YMCA. *About the YMCA* [online]. Available at: http://www.ymca.net/about_the_ymca/
[3] Program Announcement 04134: Steps to a HealthierUS: national organization partnerships. Fed Regist 2004 April 23; 69(79):22055-60. Available at: http://www.healthierus.gov/steps/rfa/2004OrgsRFA/FR04232004.htm

Implementation Measure I-7	Improve integration of program components.
Indicator I-7.5	Composition and function of Steps Leadership Team (e.g., inclusion of non-traditional agencies or partners, state or local categorical programs, key community-based organizations, or representatives of the healthcare sector.)

Rationale for Selecting This Indicator

Building leadership is a core requirement for any community program.[1] The Steps Program calls for a form of leadership that reflects and supports its complex, integrated nature: "a collaboration among several groups and individuals is often needed to address a complex issue, and a collaboration needs collaborative leadership."[2] Partnerships with government agencies and with nongovernmental lay and professional groups can be effective in chronic disease prevention and control.[3] Such partnerships allow programs to coordinate activities, maximize limited resources, and avoid duplication of efforts.

Establishing and coordinating a formal leadership team that provides direction and expertise throughout program planning, implementation, and evaluation is a core requirement of the program. The specific composition and function of the Steps Leadership Team varies from community to community; however, each team should consist of representatives of the various public and private partner organizations, the various populations served in the intervention area, and any other local groups relevant to the Steps focus areas. The team should be an example of the collaborative relationships that guide and support integrated community programs to prevent chronic disease and promote health.

Intended Use of Data

Documenting the composition of the Steps Leadership Team, and which group each team member represents, shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the Steps Program. CDC also uses this information to disseminate examples of effective leadership teams and to share lessons learned about leadership and management with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- The names of Leadership Team participants.
- The affiliation of Leadership Team participants.
- A description of the key functions of the Leadership Team.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

Communities may use different names for the Steps Leadership Team required by the Steps Program announcements. This indicator refers to the team responsible for overseeing project activities and determining project budgets and subcontracts. It does not refer to a staff management team or to a community consortium.

Data Collection and Assessment Schedules

Collected and assessed annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Work Group for Community Health and Development at the University of Kansas. *Community tool box: building leadership* [online]. 2006. Available at: http://ctb.ku.edu/tools/tk/en/tools_tk_6.jsp.
[2] Work Group for Community Health and Development at the University of Kansas. *Community tool box: collaborative leadership.* [online]. 2006. Available at: http://ctb.ku.edu/tools/en/sub_section_main_1874.htm.
[3] CDC. *Promising practices in chronic disease prevention and control: a public health framework for action.* Atlanta, GA: HHS; 2003.

Implementation Measure I-7	Improve integration of program components.
Indicator I-7.6	Composition and function of Steps State-Community Management Team (e.g., inclusion of coordinated Steps communities, non-traditional agencies or partners, state or local categorical programs, key community-based organizations, or representatives of the healthcare sector.) (State only)

Rationale for Selecting This Indicator

Building leadership is a core requirement for any community program.[1] The Steps Program calls for a form of leadership that reflects and supports its complex, integrated nature: "a collaboration among several groups and individuals is often needed to address a complex issue, and a collaboration needs collaborative leadership."[2] Partnerships with government agencies and with nongovernmental lay and professional groups can be effective in chronic disease prevention and control.[3] Such partnerships allow programs to coordinate activities, maximize limited resources, and avoid duplication of efforts.

Establishing and coordinating a formal State-Community Management team that provides direction and expertise throughout program planning, implementation, and evaluation is a core requirement of the Steps Program. The specific composition and function of the Steps State-Community Management Team varies from community to community; however, each team should include representatives of state-coordinated Steps communities; the state health department, education agency, and Office of Rural Health; any non state-coordinated Steps communities within the state borders; and other key public and private sector partners. The team should be an example of the collaborative relationships that guide and support integrated community programs to prevent chronic disease and promote health.

Intended Use of Data

Documenting the composition of the Steps State-Community Management Team, and which group each team member represents, shows that states that coordinate multiple Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the Steps Program. CDC also uses this information to disseminate examples of effective Steps State-Community Management Teams and to share lessons learned about leadership and management with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

States that coordinate multiple Steps communities send CDC the following data:

- The names of State-Community Management Team participants.
- The affiliation of State-Community Management Team participants.
- A description of the key functions of the State-Community Management Team.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

This indicator applies to state departments of health that coordinate multiple Steps community programs within their state. Small cities or rural areas, large cities or urban areas, and tribes or tribal entities funded by the Steps Program do not report on this indicator.

Communities may use different names for the State-Community Management Team required by the Steps Program announcements. This indicator refers to the team responsible for coordinating community objectives with state health plans, ensuring collaboration between state-coordinated Steps communities and other chronic disease prevention and control programs, and establishing and maintaining project staff sufficient to provide oversight and technical assistance to state-coordinated Steps communities.

Data Collection and Assessment Schedules

Collected and assessed annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

National Association of County & City Health Officials: http://www.naccho.org/

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Work Group for Community Health and Development at the University of Kansas. *Community tool box: building leadership* [online]. 2006. Available at: http://ctb.ku.edu/tools/tk/en/tools_tk_6.jsp.
[2] Work Group for Community Health and Development at the University of Kansas. *Community tool box: collaborative leadership.* [online]. 2006. Available at: http://ctb.ku.edu/tools/en/sub_section_main_1874.htm.
[3] CDC. *Promising practices in chronic disease prevention and control: a public health framework for action.* Atlanta, GA: HHS; 2003.

Implementation Measure I-7	Improve integration of program components.
Indicator I-7.7	**Provision of technical assistance to state-coordinated Steps communities (State only).**

Rationale for Selecting This Indicator

Technical assistance is a "process of connecting groups to expertise and resources that address needs and provide support ... to communities over time as they plan, implement, evaluate, and sustain efforts for making a difference."[1] Staff in community-based programs have expressed the need for "timely and accessible technical assistance across all program phases," particularly in areas such as data-based decision making, using an ecological approach, successfully implementing evidence-based interventions, and evaluating programs.[2] Technical assistance may help communities enhance competencies and specialized knowledge, increase their potential to effect change, connect to essential resources, increase the chance of successful implementation and sustainability, and overcome barriers to addressing needs.[1]

Technical assistance may be provided in many forms, including workshops and other training, mentoring, in person or Internet-based support systems, written materials, and individual consultations.[1,3] Effective technical assistance systems strike a balance between responding to the expressed needs of individual communities versus proactively stimulating discussion of overall program priorities; they also must balance activities intended to strengthen the capacity of local staff and activities directly focused on program implementation.[2]

In recent years, many government programs have shifted responsibility for program implementation from the federal to the local level, and state governments are now often expected to establish technical assistance systems that "nurture and support local community-based initiatives."[2] Providing technical assistance to state-coordinated Steps communities is a core requirement of the Steps Program for funded state departments of health. The program announcements identify key topic areas for technical assistance to state-coordinated communities, including monitoring disease burden, risk factor surveillance, program evaluation, evidence-based practices, community support, intervention selection and development, and resource development.

Intended Use of Data

Documenting the provision of technical assistance to state-coordinated Steps communities shows that funded states fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the Steps Program. CDC also uses this information to disseminate examples of technical assistance to support the activities of state-coordinated communities and to share lessons learned about providing such support with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

States that coordinate multiple Steps communities send CDC the following data:

- At least one example of each type of technical assistance provided to state-coordinated Steps communities. Types of technical assistance include site visits to Steps communities; direct technical assistance (e.g. individual consultations or mentoring); training; and linking communities to existing programs, resources, or infrastructure.
- An indication of which relevant topics were addressed by each type of technical assistance (see special instructions).
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

This indicator applies to state departments of health that coordinate multiple Steps community programs within their state. Small cities or rural areas, large cities or urban areas, and tribes or tribal entities funded by the Steps Program do not report on this indicator.

Relevant topics include obesity, diabetes, asthma, poor nutrition, physical inactivity, tobacco use, monitoring disease burden, risk factor surveillance, program evaluation, evidence-based practices, community support, intervention selection and development, resource development, integration, sustainability, partnership/collaboration, health disparities, media/communications, and policy.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

National Association of County & City Health Officials: http://www.naccho.org/

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] Work Group for Community Health and Development at the University of Kansas. *Community tool box: assuring technical assistance* [online]. 2006. Available at: http://ctb.ku.edu/tools/bp/en/tools_bp_9.jsp

[2] Mitchell RE, Florin P, Stevenson J. Supporting community-based prevention and health promotion initiatives: developing effective technical assistance systems. *Health education & behavior*. 2002;29:620-639.

[3] Roussos ST, Fawcett SB. A review of collaborative partnerships as a strategy for improving community health. *Annual review of public health*. 2000;21:369-402.

Implementation Measure I-8	Document that intended populations participate in Steps communities' activities and interventions.
Indicator I-8.1	**Reach (i.e. service to intervention areas or specific populations identified in community action plan)**

Rationale for Selecting This Indicator

Reach is the "proportion of intended target audience that participates in an intervention."[1] It is important to note that *reach* is not simply a count of participants. Rather, measures of reach are concerned with whether or not the intended audience participates in a given activity or intervention. Documenting reach is a key component of process evaluation: for a program to achieve its intended outcomes, activities and interventions must reach intended participants. The selected indicator is a proxy measure of reach. Given the reality of the resources available to the Steps Program, it is not feasible to measure reach using the above definition. This indicator addresses the essential question of a measure of reach: did funded communities provide service to intended intervention areas or specific populations?

As a required element of the Steps Program, Steps communities provide services to specific intervention areas or populations. Each community defines its intervention areas and populations based on local needs and context.

Intended Use of Data

Documenting service to specific intervention areas or populations shows that Steps communities fulfilled a core requirement of the Steps Program. Communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use data submitted on this indicator to make data-driven decisions regarding priorities for technical assistance to improve the Steps Program. CDC also uses this information to disseminate examples of the program's intended audiences and to share lessons learned about implementing interventions to reach those audiences with all Steps communities and other interested public health programs.

Data Source

Steps community program records

How Indicator is Measured

Steps communities send CDC the following data:

- A list of each intervention.
- Whether or not the intervention was implemented in the population(s) identified in the community action plan.
- An indication of which population(s) participated in the intervention.
- Any contextual information or supplemental data that further explain or support the data for this indicator.

Special Instructions

Steps communities may wish to use the space for contextual information to document any challenges or successful strategies for reaching intended populations identified in the community action plan. They may also wish to use this space to provide examples of participation in activities that go beyond interventions (e.g., planning or evaluation).

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Program Assessment Rating Tool (PART): http://www.whitehouse.gov/omb/part/index.html

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Steckler A, Linnan L, eds. *Process evaluation in public health interventions.* San Francisco: Jossey-Bass; 2002.

Performance Measure O-1	Increased knowledge and awareness about healthy behaviors such as healthful eating, physical activity, and avoiding tobacco use.
Indicator O-1	Community-specific indicators.

Rationale for Selecting This Indicator

Multiple factors influence any given health-related behavior. Knowledge and awareness about healthy behaviors are among the factors that predispose individuals or populations to change their behavior.[1] Health behavior theories show that knowledge, awareness, and other predisposing factors are precursors to behavior change, so changes in these short-term outcomes are expected to contribute to desired behavior changes. Specifically, increased knowledge and awareness about healthy behaviors can lead to more healthful eating, increased physical activity, and avoidance of tobacco use—changes which can contribute to the prevention or reduction of complications of chronic diseases, including obesity, diabetes, and asthma.

There is little scientific consensus on appropriate indicators to measure knowledge and awareness about healthy behaviors. The Centers for Disease Control and Prevention (CDC) reviewed existing guidance documents and indicators, consulted with Steps Program stakeholders, including staff from CDC divisions whose primary responsibility is one of the Steps Program focus areas, and reviewed relevant survey items currently used by Steps communities. While there is a range of program activities and indicators, there is also considerable overlap between leading indicators from communities and other sources. The indicators listed in the Core Performance Measures matrix (Appendix B) are recommendations based on these reviews and consultations.

Indicators, data sources, and survey questions for this performance measure will be determined by each Steps community and will vary from one community to another. Communities will select these items based on the context and focus of their programs.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. CDC uses these data to track progress toward short-term outcomes related to more healthful eating, increased physical activity, and reduced tobacco use. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting increased knowledge and awareness about healthy behaviors. These data are used to recognize successes and to determine progress toward intended outcomes related to increased knowledge and awareness about healthy behaviors. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

Community-specific data sources

How Indicator Is Measured

Determined by each community

Survey Question(s)

Determined by each community

Special Instructions

Indicators, data sources, and survey items for this performance measure will vary by Steps community.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Green, L. W. & M. W. Kreuter. *Health promotion planning: an educational and ecological approach, 3rd edition*. Mountain View, CA: Mayfield; 1999.

Performance Measure O-2	Increased knowledge about getting appropriate preventive screenings.
Indicator O-2	Community-specific indicators.

Rationale for Selecting This Indicator

Multiple factors influence any given health-related behavior. Knowledge about healthy behaviors is one factor that predisposes individuals or populations to change their behavior.[1] Health behavior theories show that knowledge, awareness, and other predisposing factors are precursors to behavior change, so changes in these short-term outcomes are expected to contribute to desired behavior changes. Specifically, increased patient or provider knowledge about getting appropriate preventative screenings can lead to increased use of those preventive screenings, which in turn can contribute to the prevention or reduction of complications of chronic diseases, including obesity, diabetes, and asthma.

There is little scientific consensus on appropriate indicators to measure knowledge about getting appropriate preventive screenings. Indicators, data sources, and survey questions for this performance measure are determined by each Steps community and vary from one community to another. Communities select indicators, data sources, and survey questions based on the context and focus of their programs. However, indicators for all communities should reinforce the recommendations of the U.S. Preventive Services Task Force contained in the *Guide to Clinical Preventive Services.*[2]

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward short-term outcomes related to improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting increased knowledge about getting appropriate preventive screenings. These data are used to recognize successes and to determine progress toward intended outcomes related to increased knowledge about getting appropriate preventive screenings. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

Community-specific data sources

How Indicator Is Measured

Determined by each community

Survey Question(s)

Determined by each community

Special Instructions

Indicators, data sources, and survey items for this performance measure will vary by Steps community.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Green, L. W. & M. W. Kreuter. *Health promotion planning: an educational and ecological approach, 3rd edition*. Mountain View, CA: Mayfield; 1999.
[2] USPSTF. *Guide to Clinical Preventive Services, 2005*. (Publication No. AHRQ 05-0570). Rockville, MD: Agency for Healthcare Research and Quality; 2005. Available at: http://www.ahrq.gov/clinic/pocketgd.htm

Performance Measure O-3	Increased physical activity and healthful eating for children and adults.
Indicator O-3.1	Fruit and vegetable consumption among adults aged 18 or older.

Rationale for Selecting This Indicator

High consumption of fruits and vegetables is associated with low dietary fat intake and low incidence of several chronic diseases, including cardiovascular disease and some cancers.[1] For both adults and school-age children, there is an inverse association between eating fruit and body mass index (BMI): as fruit consumption increases, BMI decreases.[2] High BMI (indicating either overweight or obesity) is a risk factor for high blood pressure, high cholesterol, heart disease, diabetes, several forms of cancer, and other chronic health problems.[3] Having populations adopt healthy diets, including increasing consumption of fruits and vegetables, can help to prevent or reduce the prevalence of overweight, obesity, and their related health risks.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to increases in healthful eating. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting nutrition. These data are used to recognize successes and to determine progress toward intended outcomes related to improved nutrition. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 17: Fruits and Vegetables

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report eating ≥ 5 fruits and vegetables per day.

Denominator: Respondents aged ≥18 years who report eating any fruits and vegetables per day, including zero (excluding unknowns and refusals).

Survey Question(s)

17.1 How often do you drink fruit juices such as orange, grapefruit, or tomato?

17.2 Not counting juice, how often do you eat fruit?

17.3 How often do you eat green salad?

17.4 How often do you eat potatoes not including french fries, fried potatoes, or potato chips?

17.5 How often do you eat carrots?

17.6 Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat? (Example: A serving of vegetables at both lunch and dinner would be two servings.)

Special Instructions

All six questions must be asked in the prescribed order to obtain valid data on the indicator.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] Ness AR, Powles JW. High costs of poor eating patterns in the United States. In: Frazao E, editor. *America's eating habits: changes and consequences.* (Agriculture Information bulletin No. AIB750). Washington, DC: U.S. Department of Agriculture, Economic Research Service; 1999:5-32.. Available at: www.ers.usda.gov/publications/aib750

[2] Lin B-H & Morrison RM. Higher fruit consumption linked with lower body mass index. *Food Review (Economic Research Service, USDA)*. 2002;25:28-32.

[3] NHLBI. *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults.* (NIH Publication No. 98-4083). NIH; 1998. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

Performance Measure O-3	Increased physical activity and healthful eating for children and adults.
Indicator O-3.2	Fruit and vegetable consumption among youth.

Rationale for Selecting This Indicator

High consumption of fruits and vegetables is associated with low dietary fat intake and low incidence of several chronic diseases, including cardiovascular disease and some cancers.[1] For both adults and school-age children, there is an inverse association between eating fruit and body mass index (BMI): as fruit consumption increases, BMI decreases.[2] High BMI (indicating either overweight or obesity) is a risk factor for high blood pressure, high cholesterol, heart disease, diabetes, several forms of cancer, and other chronic health problems.[3] Overweight adolescents have a 70% chance of becoming overweight or obese adults.[4] Establishing healthy eating behaviors can help young people achieve normal body weight, thereby reducing the health risks associated with being overweight or obese.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to increases in healthful eating. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting nutrition. These data are used to recognize successes and to determine progress toward intended outcomes related to improved nutrition. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)
Food Section

How Indicator Is Measured

Numerator: Respondents in grades 9–12 who report eating ≥ 5 fruits and vegetables per day during the past 7 days.

Denominator: Respondents in grades 9–12 who report eating any number of fruits and vegetables per day in the past 7 days, including zero (excluding those who did not answer).

Survey Question(s)

72. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks)

73. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)

74. During the past 7 days, how many times did you eat green salad?

75. During the past 7 days, how many times did you eat potatoes? (Do not count French fries, fried potatoes, or potato chips.)

76. During the past 7 days, how many times did you eat carrots?

77. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes or carrots.)

The above questions are questions 23 – 28 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Ness AR, Powles JW. High costs of poor eating patterns in the United States. In: Frazao E, editor. *America's eating habits: changes and consequences.* (Agriculture Information bulletin No. AIB750). Washington, DC: U.S. Department of Agriculture, Economic Research Service; 1999:5-32.. Available at: www.ers.usda.gov/publications/aib750

[2] Lin B-H & Morrison RM. Higher fruit consumption linked with lower body mass index. *Food Review (Economic Research Service, USDA)*. 2002;25:28-32.

[3] NHLBI. *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults.* (NIH Publication No. 98-4083). NIH; 1998. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

[4] HHS. *The Surgeon General's call to action to prevent and decrease overweight and obesity.* Rockville, MD: HHS, Public Health Service, Office of the Surgeon General; 2001. Available at: http://www.surgeongeneral.gov/topics/obesity/

Performance Measure O-3	Increased physical activity and healthful eating for children and adults.
Indicator O-3.3	Recommended physical activity among adults aged ≥ 18 years.

Rationale for Selecting This Indicator

Research shows that virtually everyone benefits from regular physical activity.[1] The Surgeon General recommends that adults get at least 30 minutes of moderate physical activity most days of the week.[2] Low levels of activity, resulting in fewer kilocalories used as energy than consumed as food, contribute to the high prevalence of obesity in the United States.[1] Physical activity reduces the risk of premature mortality in general, and of coronary heart disease, hypertension, colon cancer, and diabetes mellitus in particular. Physical activity also improves mental health; is important for the health of muscles, bones, and joints; and appears to improve health-related quality of life.[1] Having people engage in regular, moderate physical activity provides important health benefits and helps prevent or reduce the prevalence of overweight and obesity and their related health risks.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to increases in physical activity. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions promoting physical activity. These data are used to recognize successes and to determine progress toward intended outcomes related to increased physical activity. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source(s)

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 18: Physical Activity

How Indicator Is Measured

Numerator: Number of adults aged ≥18 years who report moderate physical activity for ≥30 minutes ≥5 times/week or who report vigorous physical activity for ≥20 minutes ≥3 times/week.

Denominator: Number of adults aged ≥18 years who report any or no physical activity within the previous month (excluding unknowns and refusals).

Survey Question(s)

18.2 Now, thinking about the moderate physical activities you do … in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate?

18.3 How many days per week do you do these moderate activities for at least 10 minutes at a time?

18.4 On days that you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

18.5 Now, thinking about the vigorous physical activities you do … in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?

18.6 How many days per week do you do these vigorous activities for at least 10 minutes at a time?

18.7 On days that you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

Special Instructions

All six questions must be asked in the prescribed order to obtain valid data on the indicator.

Data Collection Schedule

Collected annually.

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta, GA: CDC, NCCDPHP; 1996.

[2] HHS. *The Surgeon General's call to action to prevent and decrease overweight and obesity*. Rockville, MD: HHS, Public Health Service, Office of the Surgeon General; 2001. Available at: http://www.surgeongeneral.gov/topics/obesity/

Performance Measure O-3	Increased physical activity and healthful eating for children and adults.
Indicator O-3.4	Recommended physical activity among youth.

Rationale for Selecting This Indicator

The Surgeon General recommends that children get at least 60 minutes of moderate physical activity most days.[1] Participation in regular physical activity helps build and maintain healthy bones and muscles; control weight and reduce fat; reduce feelings of depression and anxiety; and promote psychological well-being.[2] Low levels of participation in vigorous physical activity during grades 9-12 and sedentary leisure time behaviors, such as television viewing, are associated with risk of being overweight.[3] Positive experiences with physical activity at a young age help lay the basis for being regularly active throughout life.[2] Physical activity can help adolescents achieve normal body weight and body composition, thereby reducing the health risks of being overweight or obese.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to increases in physical activity. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions promoting physical activity. These data are used to recognize successes and to determine progress toward intended outcomes related to increased physical activity. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)
Physical Activity Section

How Indicator Is Measured

Numerator: Respondents in grades 9–12 who report doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on ≥ 5 of the past 7 days.

Denominator: Respondents in grades 9–12 who report doing any or no physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on ≥ 5 of the past 7 days (excluding those who did not answer).

Survey Question(s)

80. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day**? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)

The above question is question 30 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] HHS. *The Surgeon General's call to action to prevent and decrease overweight and obesity*. Rockville, MD: HHS, Public Health Service, Office of the Surgeon General; 2001. Available at: http://www.surgeongeneral.gov/topics/obesity/

[2] U.S. Department of Health and Human Services. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta, GA: CDC, NCCDPHP; 1996.

[3] Grunbaum JA, Kann L, Kinchen S, Ross J, Hawkins J, Lowry R, et al. Youth Risk Behavior Surveillance—United States, 2003. *MMWR*. 2004;53(SS-2):1–95.

Performance Measure O-3	Increased physical activity and healthful eating for children and adults.
Indicator O-3.5	Television viewing among youth.

Rationale for Selecting This Indicator

Television viewing is the principal sedentary leisure time behavior in the United States, and television viewing by young people is associated with obesity.[1,2] National surveys show a positive association between the number of hours children watch television and their risk of being overweight.[3] This correlation has several probable causes: television watching may displace participation in calorie-burning physical activities, and children may consume more high-calorie snack foods while watching television than while engaged in other activities.[4] Decreases in television viewing by young people may be associated with increases in physical activity and healthful eating, thereby indicating reduced risk of overweight or obesity and their related health risks.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to increases in physical activity and healthful eating. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions promoting physical activity and healthful eating. These data are used to recognize successes and to determine progress toward intended outcomes related to increased physical activity and healthful eating. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)

Physical Activity Section

How Indicator Is Measured

Numerator: Respondents in grades 9–12 who report watching television for ≥3 hours on an average school day.

Denominator: Respondents in grades 9–12 who report watching television for any number of hours, including zero, on an average school day (excluding those who did not answer).

Survey Question(s)

81. On an average school day, how many hours to you watch TV?

The above question is question 31 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

Healthy People 2010: http://www.healthypeople.gov/default.htm

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Crespo CJ, Smith E, Troian RP, Bartlett SJ, Macera CA, & Anderson RE. Television watching, energy intake, and obesity in US children. *Archives of Pediatric and Adolescent Medicine*. 2001;155:360-365.
[2] Kaur H, Choi WS, Mayo MS, & Harris KJ. Duration of television watching is associated with increased body mass index. *Journal of Pediatrics*. 2003;143(4):506-511.
[3] Andersen, R, Crespo C, Bartlett S, Cheskin L, & Pratt M. Relationship of physical activity and TV watching with body weight and level of fatness among children: results for the third National Health and Nutrition Examination Survey. *JAMA*. 1998;279(12):938-42.
[4] Clancy-Hepburn K, Hickey AA, & Nevill G. Children's behavior responses to TV food advertisements. *J Nutr Educ*. 1974;6:93-6.

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.1	Health care access.

Rationale for Selecting This Indicator

Having health insurance, a high income, and a regular primary care provider or other source of ongoing health care are all strong predictors of access to quality health care.[1] Access to health care significantly influences whether people use the health care system and, ultimately, improves health outcomes. People with a usual source of health care are more likely than those without a usual source of health care to receive a variety of preventive health care services.[2] National data collected in 2003 show that during the 12 months before being surveyed, more adults without health care insurance (41.3%) than adults with health insurance (8.6%) were unable to see a doctor when they needed to, because of cost.[3] Uninsured adults are much more likely to report being in poor or fair health than are adults who are insured. Nationally, 20.4% of uninsured adults self-report their health as *fair* or *poor* (rather than *good, very good,* or *excellent*), compared with 11.7% of insured adults.[3] Improved access to health care can contribute to increased use of health services and to the prevention or reduction of complications of chronic diseases, including obesity, diabetes, and asthma.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improved access to clinical services for diabetes, asthma, and tobacco use cessation. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions to increase access to care. These data are used to recognize successes and to determine progress toward intended outcomes related to increased access to care. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 3: Health Care Access

How Indicator Is Measured

Because this indicator is not a calculated variable, each survey item has its own numerator and denominator, as shown in the table below. The fourth survey item (frequency of routine medical checkups) has four numerators, one to determine the ratio of respondents who report having a routine medical checkup within the previous 12 months, a second to determine the ratio of respondents who report having a routine medical checkup between 1 and 2 years ago, a third to determine the ratio of respondents who report having a routine medical checkup between 2 and 5 years ago, and a fourth to determine the ratio of respondents who report having a routine medical checkup 5 or more years ago.

BRFS Data Report Item Label	Numerator	Denominator
Health Plan	Respondents aged ≥18 years who report having any kind of health care coverage.	Respondents aged ≥18 years who report having or not having any kind of health care coverage (excluding unknowns and refusals).
Personal Doctor	Respondents aged ≥18 years who report having one person they think of as their personal doctor or health care provider.	Respondents aged ≥18 years who report having or not having one person they think of as their personal doctor or health care provider (excluding unknowns and refusals).
Medical Cost	Respondents aged ≥18 years who report a time in the past 12 months when they needed to see a doctor but could not because of cost (excluding unknowns and refusals).	Respondents aged ≥18 years who report experiencing or not experiencing a time in the past 12 months when they needed to see a doctor but could not because of cost (excluding unknowns and refusals).
Routine Medical Checkup		
Within the previous 12 months	Respondents aged ≥18 years who report having visited a doctor for a routine checkup in the past 12 months (1-12 months).	Respondents aged ≥18 years who report having visited or not visited a doctor for a routine checkup in the past 12 months (excluding unknowns and refusals).
Between 1 and 2 years ago?	Respondents aged ≥18 years who report having visited a doctor for a routine checkup between 1 and 2 years ago.	
Between 2 and 5 years ago?	Respondents aged ≥18 years who report having visited a doctor for a routine checkup between 2 and 5 years ago.	
5 or more years ago	Respondents aged ≥18 years who report having visited a doctor for a routine checkup 5 or more years ago.	

Survey Question(s)

3.1 Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

3.2 Do you have one person you think of as your personal doctor or health care provider?

3.3 Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?

3.4 About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

Special Instructions

This indicator is not a calculated variable. Instead, the indicator comprises four individual survey items that, taken together, describe a person's overall access to health care.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

Healthy People 2010: http://www.healthypeople.gov/default.htm

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] HHS. *Healthy People 2010: understanding and improving health, 2nd ed*. Washington, DC: GPO; 2000. Available at http://www.healthypeople.gov/Document/tableofcontents.htm

[2] Moy, E.; Bartman, B.A.; & Weir, M.R. Access to hypertensive care: effects of income, insurance, and source of care. *Archives of Internal Medicine*. 1995;155(14):1497-1502.

[3] State Health Access Data Assistance Center. *Characteristics of the uninsured: a view from the states*. Minneapolis, MN: University of Minnesota; 2004. Available at http://www.rwjf.org/research/researchdetail.jsp?id=1364&ia=132

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.2	Foot examination among adults aged 18 or older with diabetes.

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and the leading cause of non-traumatic lower-limb amputations.[3] People with diabetes are at increased risk for pathologic changes of their lower extremities; these changes can lead to serious foot problems, including amputation.[4] The American Diabetes Association recommends annual foot examinations to identify high-risk foot conditions for people with diabetes.[5] Comprehensive foot care programs can reduce amputation rates by 45% to 85%.[6] Clinical foot examinations are an indicator of quality clinical services; they promote early detection and treatment of problems and can prevent diabetes-related complications, including amputation.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improvements in the quality of clinical services for diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes care. These data are used to recognize successes and to determine progress toward intended outcomes related to improved clinical services. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 5: Diabetes; Module 1: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥ 18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant) who report having a clinical foot exam within the past 12 months.

Denominator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes? (Core Section 5: Diabetes)

9. About how many times in the past 12 months has a health professional checked your feet for any sores or irritations? (Module 1: Diabetes)

Special Instructions

Respondents who answer the diabetes core question 5.1 and indicate that they were told by a doctor they have diabetes (1. Yes) must be asked the six diabetes module questions listed in Appendix D. These six questions must be asked in the prescribed order even if not all the questions in the BRFS diabetes module are used. If the six diabetes module questions not required for the core performance measures are not asked, the data columns for those questions should be filled in with the code for refusal.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf

[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf

[3] Reiber GE, Smith D, McNamara K, & Preston S: The epidemiology of amputation in the United States, 1989-1992. In National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995.

[4] CDC. Indicators for chronic disease surveillance. *MMWR*. 2004;53(RR11):1-6. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5311a1.htm

[5] American Diabetes Association. Standards of medical care in diabetes. *Diabetes Care.* 2005;28(Supplement 1):S4-36.

[6] Bild DE, Selby JV, Sinnock P, Browner WS, Braveman P & Showstack JA. Lower-extremity amputation in people with diabetes: epidemiology and prevention. *Diabetes Care*. 1989;12:24-31.

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.3	Dilated eye examination among adults aged 18 or older with diabetes.

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and the leading cause of new cases of blindness for adults aged 20-74 years.[3] The American Diabetes Association recommends annual dilated eye examinations for people with diabetes.[4] Detecting and treating diabetic eye disease with laser therapy can reduce the development of severe vision loss by an estimated 50% to 60%.[5] Annual eye examinations are an indicator of quality clinical services; they promote early detection and treatment of problems and can prevent diabetes-related complications, including loss of vision.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improvements in the quality of clinical services for diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes care. These data are used to recognize successes and to determine progress toward intended outcomes related to improved clinical services. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 5: Diabetes; Module 1: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant) who report having received a dilated eye exam within the past 12 months.

Denominator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes? (Core Section 5: Diabetes)

10. When was the last time you had an eye exam in which the pupils were dilated? This would have made you temporarily sensitive to bright light. (Module 1: Diabetes)

Special Instructions

Respondents who answer the diabetes core question 5.1 and indicate that they were told by a doctor they have diabetes (1. Yes) must be asked the six diabetes module questions listed in Appendix D. These six questions must be asked in the prescribed order even if not all the questions in the BRFS diabetes module are used. If the six diabetes module questions not required for the core performance measures are not asked, the data columns for those questions should be filled in with the code for refusal.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf

[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf

[3] Klein R & Klein BEK. Vision disorders in diabetes. In National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995.

[4] American Diabetes Association. Standards of medical care in diabetes. *Diabetes Care.* 2005;28(Supplement 1):S4-36.

[5] Ferris FL. How effective are treatments for diabetic retinopathy? *JAMA*. 1993;269:1290-1.

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.4	**Glycosylated hemoglobin measurement at least twice a year among adults aged 18 or older with diabetes.**

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and can lead to serious complications such as heart disease, stroke, high blood pressure, blindness, kidney damage, and lower-limb amputations.[3] Glycemic control for adults with diabetes helps prevent or delay the onset or progression of diabetes-related complications (e.g., retinopathy, lower extremity amputations, and end-stage renal disease).[4] In general, for every 1% reduction in results of A1C blood tests, the risk of developing microvascular diabetic complications (eye, kidney, and nerve disease) is reduced by 37%.[5] The American Diabetes Association recommends performing the A1C test (glycosylated hemoglobin measurement) at least twice a year for patients who meet treatment goals and who have stable glycemic control.[6] Regular glycosylated hemoglobin measurements are an indicator of quality clinical services; such measurements help people with diabetes control glucose levels, which may prevent or reduce diabetes-related complications.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improvements in the quality of clinical services for diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes care. These data are used to recognize successes and to determine progress toward intended outcomes related to improved clinical services. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 5: Diabetes; Module 1: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant) who report having received a glycosylated hemoglobin measurement ("A one C") at least twice a year.

Denominator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes? (Core Section 5: Diabetes)

8. A test for "A one C" measures the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse or other health professional checked you for "A one C"? (Module 1: Diabetes)

Special Instructions

Respondents who answer the diabetes core question 5.1 and indicate that they were told by a doctor they have diabetes (1. Yes) must be asked the six diabetes module questions listed in Appendix D. These six questions must be asked in the prescribed order even if not all the questions in the BRFS diabetes module are used. If the six diabetes module questions not required for the core performance measures are not asked, the data columns for those questions should be filled in with the code for refusal.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf
[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf
[3] National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995
[4] CDC. Indicators for chronic disease surveillance. MMWR 2004; 53 (No. RR-11): 98.
[5] Stratton IM, Adler AI, Neil HA, et al. Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35): prospective observational study. *BMJ*. 2000;321:405-412.
[6] American Diabetes Association. Standards of medical care in diabetes. *Diabetes Care.* 2005;28(Supplement 1):S4-36.

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.5	**Adults with asthma aged 18 or older receiving routine checkups for asthma.**

Rationale for Selecting This Indicator

Asthma affects almost 20 million people, or 7% of the U.S. population.[1] Asthma is responsible for about 500,000 hospitalizations,[2] 5,000 deaths,[2] and 134 million days of restricted activity[3] a year. Periodic clinical assessment and monitoring are essential for asthma management and can help determine whether the goals of asthma therapy are being achieved.[4] These goals include preventing chronic and troublesome symptoms, maintaining normal pulmonary function, maintaining normal physical activity levels, preventing recurrent exacerbations of asthma, and minimizing the need for emergency department visits or hospitalizations. An expert panel of the National Asthma Education and Prevention Program recommends that people with asthma receive at least two routine checkups each year.[4] Routine checkups for asthma are an indicator of quality clinical services; they promote early detection and treatment of problems and can prevent or reduce asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improvements in the quality of clinical services for asthma. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting asthma care. These data are used to recognize successes and to determine progress toward intended outcomes related to improved clinical services. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 9: Asthma; Module 9: Adult Asthma History

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report receiving ≥2 routine checkups for asthma in the past 12 months.

Denominator: Respondents aged ≥18 years who report ever told by a doctor or health professional that they have asthma and have had an episode of asthma or an asthma attack in the past 12 months (excluding unknowns and refusals).

Survey Question(s)

9.1 Have you ever been told by a doctor, nurse, or other health professional that you had asthma? (Core Section 9: Asthma)

9.2 Do you still have asthma? (Core Section 9: Asthma)

2. During the past 12 months, have you had an episode of asthma or an asthma attack? (Module 9: Adult Asthma History)

5. During the past 12 months, how many times did you see a doctor, nurse, or other health professional for a routine checkup for your asthma? (Module 9: Adult Asthma History)

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Healthy People 2010: http://www.healthypeople.gov/default.htm

National Asthma Education and Prevention Program (NAEPP): http://www.nhlbi.nih.gov/about/naepp/

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National Health Interview Survey data: 2003 asthma data* [online]. HHS, CDC, National Center for Environmental Health. 2003. Available at http://www.cdc.gov/asthma/NHIS/default.htm.
[2] NHLBI. *Data Fact Sheet: Asthma Statistics.* Bethesda, MD: NIH, Public Health Service PHS; 1999.
[3] Collins, JG. *Prevalence of selected chronic conditions: United States 1990-1992*. National Center for Health Statistics: Vital Health Statistics. 10(194); 1997. Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_194.pdf
[4] NAEPP. *Clinical practice guidelines: expert panel report 2: guidelines for the diagnosis and management of asthma.* (NIH Publication No. 97-4051). NIH, NHLBI; 1997. Available at: http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.6	Adults aged 18 or older advised by health care provider to quit smoking.

Rationale for Selecting This Indicator

Cigarette smoking causes approximately 440,000 deaths in the United States each year, making it the nation's leading preventable cause of death.[1] Smoking increases the risk of heart disease, cancer, stroke, and chronic lung disease. Quitting smoking has major and immediate health benefits. For example, people who quit smoking before age 50 have half the risk of dying during the next 15 years compared with people who continue to smoke.[2] Evidence shows that people are more likely to quit smoking when a health care professional advises them to do so.[3] For this reason, experts recommend that health care providers advise patients who smoke to quit smoking.[3] An increase in the number of adult smokers advised by their health care providers to quit smoking indicates an improvement in the quality of clinical services for tobacco use cessation. This improvement may help to increase the number of tobacco users who quit and to prevent tobacco-related diseases, including diabetes complications and asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improvements in the quality of clinical services for tobacco use cessation. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting tobacco use cessation. These data are used to recognize successes and to determine progress toward intended outcomes related to improved clinical services. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 11: Tobacco Use; Module 21: Smoking Cessation

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report having been advised to quit smoking by a doctor or other health provider in the past 12 months.

Denominator: Respondents aged ≥18 years who report having smoked 100 cigarettes in their lifetime and are current smokers on every day or some days and saw a doctor, nurse, or other health professional to get any kind of care in the past 12 months (excluding unknowns and refusals).

Survey Question(s)

11.1 Have you smoked at least 100 cigarettes in your entire life? (Core Section 11: Tobacco Use)

11.2 Do you now smoke cigarettes every day, some days, or not at all? (Core Section 11: Tobacco Use)

2. In the past 12 months, how many times have you seen a doctor, nurse, or other health professional to get any kind of care for yourself? (Module 21: Smoking Cessation)

3. In the past 12 months, on how many visits were you advised to quit smoking by a doctor, or other health provider? (Module 21: Smoking Cessation)

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

The U.S. Preventive Services Task Force (AHRQ): http://www.ahrq.gov/clinic/uspstfix.htm

[1] CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR*. 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

[2] HHS. *The health benefits of smoking cessation*. (HHS Publication No. (CDC) 90-8416). Atlanta, GA: HHS, Public Health Service, CDC, NCCDPHP, OSH;1990.

[3] Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: HHS, Public Health Service; June 2000. Available at: http://www.surgeongeneral.gov/tobacco/default.htm

Performance Measure O-4	Improved access to and quality of clinical services for diabetes, asthma, and tobacco use cessation.
Indicator O-4.7	Tobacco use cessation attempts by adolescent smokers.

Rationale for Selecting This Indicator

Cigarette smoking causes about 440,000 deaths each year in the United States, making it the nation's leading preventable cause of death.[1] Tobacco use begins primarily during adolescence; almost 90% of adult smokers began by age 18 years.[2] Young people who are established smokers are at high risk of becoming addicted to cigarettes, increasing the likelihood they will use tobacco products throughout adulthood and subsequently be at risk for tobacco-related diseases such as lung cancer, heart disease, and emphysema.[3] Quitting smoking has major and immediate health benefits. For example, people who quit smoking before age 50 have half the risk of dying during the next 15 years compared with people who continue to smoke.[4] Evidence shows that people are more likely to quit smoking when a health care professional advises them to do so.[3] For this reason, experts recommend that health care providers advise patients who smoke to quit smoking.[5] An increase in the number of adolescent smokers advised by their health care providers to quit smoking would indicate an improvement in the quality of clinical services for tobacco use cessation. This improvement may help to increase the number of tobacco users who quit and to prevent tobacco-related diseases, including diabetes complications and asthma exacerbations.

This indicator is a proxy for the stated performance measure. Data are not available to measure the number of young people advised by their health care providers to quit smoking, which would be an indicator of the quality of clinical services for tobacco use cessation (the stated performance measure). Instead, adolescents' attempts to stop smoking are used as an indicator that may reflect advice from health professionals to quit smoking.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to improvements in the quality of clinical services for tobacco use cessation. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting tobacco use cessation by young people. These data are used to recognize successes and to determine progress toward intended outcomes related to improved clinical services. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)

Tobacco Use Section

How Indicator Is Measured

Numerator: Respondents in grades 9-12 who report that they have tried to quit smoking in the past 12 months.

Denominator: Respondents in grades 9-12 who report that they are a current smoker (excluding those who did not answer).

Survey Question(s)

30. During the past 30 days, on how many days did you smoke cigarettes?

35. During the past 12 months, did you ever try to quit smoking cigarettes?

The above questions are questions 10 and 15 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR.* 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

[2] HHS. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: CDC; 1994.

[3] Jackson C & Dickinson D. Cigarette consumption during childhood and persistence of smoking through adolescence. *Archives of Pediatric & Adolescent Medicine.* 2004;158(11):1050-6.

[4] HHS. *The health benefits of smoking cessation.* (HHS Publication No. (CDC) 90-8416). Atlanta, GA: HHS, Public Health Service, CDC, NCCDPHP, OSH;1990.

[5] Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: HHS, Public Health Service; June 2000. Available at: http://www.surgeongeneral.gov/tobacco/default.htm

Performance Measure O-5	Increased identification of persons with pre-diabetes and diabetes.
Indicator O-5.1	Reduce the overall rate of diabetes that is clinically diagnosed among adults.

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and can lead to serious complications such as heart disease, stroke, high blood pressure, blindness, kidney damage, and lower-limb amputations.[3] Identifying people with undiagnosed diabetes is important because people with diabetes and their health care providers can work together to reduce diabetes-related complications by controlling levels of blood glucose, blood pressure, and blood lipids and by following other recommended preventive care practices.[4]

Although increasing the identification of people with pre-diabetes and undiagnosed diabetes is a key outcome of the Steps Program, its measurement is not feasible. A precise indicator for this performance measure would require data about the incidence of diabetes (i.e., the number of new cases of diabetes that occur during a given period). To measure the proportion of adults with diabetes whose condition has been diagnosed, we would need to know the number of newly diagnosed cases of diabetes and the number of people with undiagnosed diabetes. The selected indicator is a proxy measure for the stated performance measure. Because of the difficulties in measuring incidence, prevalence (e.g., the total number of people with diagnosed diabetes) is often used as a proxy measure. The overall rate of diabetes that is clinically diagnosed among adults (as measured by this indicator) may initially increase as screening improves and more people with undiagnosed diabetes are identified. Ultimately, however, reductions in the rate of diagnosed diabetes probably indicate improved prevention efforts.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to the identification of people with undiagnosed diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes. These data are used to recognize successes and to determine progress toward intended outcomes related to increased identification of people with undiagnosed diabetes and reduced complications of diabetes. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 5: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report ever having been told by a doctor that they have diabetes other than diabetes during pregnancy.

Denominator: Respondents aged ≥18 years who report ever or not ever having been told or by a doctor that they have diabetes (excluding unknowns and refusals).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes?

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf

[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf

[3] National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995

[4] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2003.* Rev ed. Atlanta, GA: HHS, CDC; 2004. Available at http://www.cdc.gov/diabetes/pubs/factsheet.htm.

Performance Measure O-5	Increased identification of persons with pre-diabetes and diabetes.
Indicator O-5.2	Reduce the overall rate of diabetes that is clinically diagnosed among youth.

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is one of the most common chronic diseases among children in the United States. About 150,000 young people under 18 years have diabetes.[1] In the last two decades, the prevalence of type 2 diabetes among U.S. children and adolescents has increased. Researchers estimate that between 8% and 43% of new childhood cases of diabetes are type 2 diabetes.[2] Diabetes is the sixth leading cause of death in the United States[3] and can lead to serious complications such as heart disease, stroke, high blood pressure, blindness, kidney damage, and lower-limb amputations.[4] Identifying people with undiagnosed diabetes is important because people with diabetes and their health care providers can work together to reduce diabetes-related complications by controlling levels of blood glucose, blood pressure, and blood lipids and by following other recommended preventive care practices.[5]

Although increasing the identification of people with pre-diabetes and undiagnosed diabetes is a key outcome of the Steps Program, its measurement is not feasible. A precise indicator for this performance measure would require data about the incidence of diabetes (i.e., the number of new cases of diabetes that occur during a given period). To measure the proportion of young people with diabetes whose condition has been diagnosed, we would need to know the number of newly diagnosed cases of diabetes and the number of young people with undiagnosed diabetes. The selected indicator is a proxy measure for the stated performance measure. Because of the difficulties in measuring incidence, prevalence (e.g., the total number of young people with diagnosed diabetes) is often used as a proxy measure for incidence. The overall rate of diabetes that is clinically diagnosed among young people (as measured by this indicator) may initially increase as screening improves and more young people with undiagnosed diabetes are identified. Ultimately, however, reductions in the rate of diagnosed diabetes probably indicate improved prevention efforts.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to the identification of people with undiagnosed diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes in young people. These data are used to recognize successes and to determine progress toward intended outcomes related to increased identification of people with undiagnosed diabetes and reduced complications of diabetes. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Steps Youth Risk Behavior Survey (Steps YRBS)

How Indicator Is Measured

Numerator: Respondents in grades 9-12 who report ever having been told by a doctor or nurse that they have diabetes.

Denominator: Respondents in grades 9-12 who report ever or not ever having been told by a doctor or nurse that they have diabetes (excluding those who did not answer).

Survey Question(s)

35. Has a doctor or nurse ever told you that you have diabetes?

Note: The number above refers to the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas. This question is not included on the core YRBS questionnaire.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

10 Essential Public Health Services: http://www.cdc.gov/od/ocphp/nphpsp/EssentialPHServices.htm

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf
[2] CDC. *SEARCH for Diabetes in Youth: fact sheet*. 2005. Available at http://www.cdc.gov/diabetes/pubs/factsheets/search.htm
[3] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf
[4] National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995
[5] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2003.* Rev ed. Atlanta, GA: HHS, CDC; 2004. Available at http://www.cdc.gov/diabetes/pubs/factsheet.htm.

Performance Measure O-6	Improved self-management of diabetes and asthma.
Indicator O-6.1	Self blood-glucose monitoring among adults aged 18 or older with diabetes.

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and can lead to serious complications such as heart disease, stroke, high blood pressure, blindness, kidney damage, and lower-limb amputations.[3] Glycemic control for adults with diabetes helps prevent or delay the onset or progression of diabetes-related complications (e.g., retinopathy, lower extremity amputations, and end-stage renal disease).[4] In general, for every 1% reduction in results of A1C blood tests (glycosylated hemoglobin measurement), the risk of developing microvascular diabetic complications (eye, kidney, and nerve disease) is reduced by 37%.[5] Self blood-glucose monitoring can help people with diabetes control glucose levels and is associated with a decreased likelihood of diabetes-related complications.[6,7]

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to improved self-management of diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes self-management. These data are used to recognize successes and to determine progress toward intended outcomes related to increased effective self-management of diabetes and reduced complications of diabetes. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 5: Diabetes; Module 1: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant) who report self-blood glucose monitoring ≥2 times daily.

Denominator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes? (Core Section 5: Diabetes)

4. About how often do you check your blood for glucose or sugar? Include times when checked by a family member or friend, but do not include times when checked by a health professional. (Module 1: Diabetes)

Special Instructions

Respondents who answer the diabetes core question 5.1 and indicate that they were told by a doctor they have diabetes (1. Yes) must be asked the six diabetes module questions listed in Appendix D. These six questions must be asked in the prescribed order even if not all the questions in the BRFS diabetes module are used. If the six diabetes module questions not required for the core performance measures are not asked, the data columns for those questions should be filled in with the code for refusal.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf

[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf

[3] National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995

[4] CDC. Indicators for chronic disease surveillance. MMWR 2004; 53 (No. RR-11): 98.

[5] Stratton IM, Adler AI, Neil HA, et al. Association of glycaemia with macrovascular and microvascular complications of type 2 diabetes (UKPDS 35): prospective observational study. *BMJ*. 2000;321:405-412.

[6] CDC. Diabetes-specific preventive-care practices among adults in a managed care population—Colorado Behavioral Risk Factor Surveillance System. *MMWR*. 1997;46:1018-1023.

[7] HHS. *Healthy People 2010: understanding and improving health, 2nd ed*. Washington, DC: GPO; 2000. Available at http://www.healthypeople.gov/Document/tableofcontents.htm.

Performance Measure O-6	Improved self-management of diabetes and asthma.
Indicator O-6.2	Self foot exam among adults aged 18 or older with diabetes.

Rationale for Selecting This Indicator

An estimated 20.8 million Americans (7% of the population) have diabetes, and for 6.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and the leading cause of non-traumatic lower-limb amputations.[3] People with diabetes are at increased risk for pathologic changes of their lower extremities; these changes can lead to serious foot problems, including amputation.[4] Conducting self foot examinations can allow people with diabetes to detect foot problems before they become severe. Routine self-management, including self foot examinations, can help to reduce diabetes-related complications, including amputation.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to improved self-management of diabetes. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes self-management. These data are used to recognize successes and to determine progress toward intended outcomes related to increased effective self-management of diabetes and reduced complications of diabetes. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 5: Diabetes; Module 1: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns) who report checking their feet ≥1 times daily for any sores or irritations.

Denominator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes? (Core Section 5: Diabetes)

5. About how often do you check your feet for any sores or irritations? Include times when checked by a family member or friend, but do not include times when checked by a health professional. (Module 1: Diabetes)

Special Instructions

Respondents who answer the diabetes core question 5.1 and indicate that they were told by a doctor they have diabetes (1. Yes) must be asked the six diabetes module questions listed in Appendix D. These six questions must be asked in the prescribed order even if not all the questions in the BRFS diabetes module are used. If the six diabetes module questions not required for the core performance measures are not asked, the data columns for those questions should be filled in with the code for refusal.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf
[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf
[3] Reiber GE, Smith D, McNamara K, & Preston S: The epidemiology of amputation in the United States, 1989-1992. In National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995.
[4] CDC. Indicators for chronic disease surveillance. *MMWR*. 2004;53(RR11):1-6. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5311a1.htm

Performance Measure O-6	Improved self-management of diabetes and asthma.
Indicator O-6.3	Symptom-free days among adults aged 18 or older with asthma.

Rationale for Selecting This Indicator

Asthma affects almost 20 million people, or 7% of the U.S. population.[1] Asthma is responsible for about 500,000 hospitalizations,[2] 5,000 deaths,[2] and 134 million days of restricted activity[3] a year. Effective asthma self-management can reduce morbidity among children and adults.[4] Goals of self management include preventing symptoms, reducing hospitalizations and urgent care visits, reducing absenteeism from work or school, and improving quality of life.4 Symptom free days are associated with successful asthma self-management, which may lead to a decrease in asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to improved self-management of asthma. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting asthma self-management. These data are used to recognize successes and to determine progress toward intended outcomes related to increased effective self-management of asthma and reduced asthma exacerbations. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 9: Asthma; Module 9: Adult Asthma History

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report having no symptoms of asthma in the past 30 days.

Denominator: Respondents aged ≥18 years who report ever told by a doctor or health professional that they have asthma and have had an episode of asthma or an asthma attack in the past 12 months (excluding unknowns and refusals).

Survey Question(s)

9.1 Have you ever been told by a doctor, nurse, or other health professional that you had asthma? (Core Section 9: Asthma)

9.2 Do you still have asthma? (Core Section 9: Asthma)

2. During the past 12 months, have you had an episode of asthma or an asthma attack? (Module 9: Adult Asthma History)

7. Symptoms of asthma include cough, wheezing, shortness of breath, chest tightness and phlegm production when you don't have a cold or respiratory infection. During the past 30 days, how often did you have any symptoms of asthma? (Module 9: Adult Asthma History)

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

National Asthma Education and Prevention Program (NAEPP): http://www.nhlbi.nih.gov/about/naepp/

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National Health Interview Survey data: 2003 asthma data* [online]. HHS, CDC, National Center for Environmental Health. 2003. Available at http://www.cdc.gov/asthma/NHIS/default.htm.
[2] NHLBI. *Data Fact Sheet: Asthma Statistics.* Bethesda, MD: NIH, Public Health Service PHS; 1999.
[3] Collins, JG. *Prevalence of selected chronic conditions: United States 1990-1992*. National Center for Health Statistics: Vital Health Statistics. 10(194); 1997. Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_194.pdf
[4] NAEPP. *Clinical practice guidelines: expert panel report 2: guidelines for the diagnosis and management of asthma.* (NIH Publication No. 97-4051). NIH, NHLBI; 1997. Available at: http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf

Performance Measure O-7	Measurable improvements in healthful eating, physical activity, and tobacco use.
Indicator O-7.1	Tobacco use cessation attempts by adult smokers.

Rationale for Selecting This Indicator

Cigarette smoking causes approximately 440,000 deaths in the United States each year, making it the nation's leading preventable cause of death.[1] Smoking increases the risk of heart disease, cancer, stroke, and chronic lung disease. Quitting smoking has major and immediate health benefits. For example, people who quit smoking before age 50 have half the risk of dying during the next 15 years compared with people who continue to smoke.[2] Attempting to quit smoking is an essential step in the process of becoming tobacco-free; increased smoking cessation attempts may lead to an increase in the number of smokers who successfully quit and to a reduction in tobacco use.[3,4] Thus, smoking cessation attempts may help to prevent tobacco-related diseases, including diabetes complications and asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to reductions in tobacco use. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting tobacco use cessation. These data are used to recognize successes and to determine progress toward intended outcomes related to increased tobacco use cessation. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 11: Tobacco Use

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report having stopped smoking for one day or longer because they were trying to quit smoking in the past 12 months.

Denominator: Respondents aged ≥18 years who report having smoked 100 cigarettes in their lifetime and are current smokers on every day or some days (excluding unknowns and refusals).

Survey Question(s)

11.1 Have you smoked at least 100 cigarettes in your entire life?

11.2 Do you now smoke cigarettes every day, some days, or not at all?

11.3 During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR*. 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

[2] HHS. *The health benefits of smoking cessation*. (HHS Publication No. (CDC) 90-8416). Atlanta, GA: HHS, Public Health Service, CDC, NCCDPHP, OSH;1990.

[3] Starr G, Rogers T, Schooley M, Porter S, Wiesen E & Jamison N. *Key outcome indicators for evaluating comprehensive tobacco control programs*. Atlanta (GA): CDC; 2005.

[4] Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: HHS, Public Health Service; June 2000. Available at: http://www.surgeongeneral.gov/tobacco/default.htm

Performance Measure O-7	Measurable improvements in healthful eating, physical activity, and tobacco use.
Indicator O-7.2	Tobacco use cessation attempts by adolescent smokers.

Rationale for Selecting This Indicator

Cigarette smoking causes approximately 440,000 deaths in the United States each year, making it the nation's leading preventable cause of death.[1] Tobacco use begins primarily during adolescence; almost 90% of adult smokers began by age 18 years.[2] Young people who are established smokers are at high risk of becoming addicted to cigarettes, increasing the likelihood they will use tobacco products throughout adulthood and subsequently be at risk for tobacco-related diseases such as lung cancer, heart disease, and emphysema.[3] Quitting smoking has major and immediate health benefits. For example, people who quit smoking before age 50 have half the risk of dying during the next 15 years compared with people who continue to smoke.[4] Attempting to quit smoking is an essential step in the process of becoming tobacco-free; increased smoking cessation attempts may lead to an increase in the number of smokers who successfully quit and to a reduction in tobacco use.[5,6] Thus, smoking cessation attempts by adolescents may help to prevent tobacco-related diseases, including diabetes complications and asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to reductions in tobacco use. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting tobacco use cessation by adolescents. These data are used to recognize successes and to determine progress toward intended outcomes related to increased tobacco use cessation. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)

Tobacco Use Section

How Indicator Is Measured

Numerator: Respondents in grades 9-12 who report having tried to quit smoking in the past 12 months.

Denominator: Respondents in grades 9-12 who report having smoked ≥1 day in the past 30 days (excluding those who did not answer).

Survey Question(s)

30. During the past 30 days, on how many days did you smoke cigarettes?

35. During the past 12 months, did you ever try to quit smoking cigarettes?

The above questions are questions 10 and 15 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR*. 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

[2] HHS. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

[3] Jackson C & Dickinson D. Cigarette consumption during childhood and persistence of smoking through adolescence. *Archives of Pediatric & Adolescent Medicine.* 2004;158(11):1050-6.

[4] HHS. *The health benefits of smoking cessation.* (HHS Publication No. (CDC) 90-8416). Atlanta, GA: HHS, Public Health Service, CDC, NCCDPHP, OSH;1990.

[5] Starr G, Rogers T, Schooley M, Porter S, Wiesen E & Jamison N. *Key outcome indicators for evaluating comprehensive tobacco control programs*. Atlanta (GA): CDC; 2005.

[6] Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: HHS, Public Health Service; June 2000. Available at: http://www.surgeongeneral.gov/tobacco/default.htm

Performance Measure O-7	Measurable improvements in healthful eating, physical activity, and tobacco use.
Indicator O-7.3	Cigarette smoking among adults aged 18 or older.

Rationale for Selecting This Indicator

Cigarette smoking causes approximately 440,000 deaths in the United States each year, making it the nation's leading preventable cause of death.[1] Smoking increases the risk of heart disease, cancer, stroke, and chronic lung disease. Exposure to secondhand smoke can lead to lung cancer and heart disease in adults and to health problems such as asthma, sudden infant death syndrome, and lower respiratory infections in children.[2,3,4] A reduction in cigarette smoking by adults represents measurable improvement in tobacco use and may help to prevent tobacco related diseases, including diabetes complications and asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to reductions in tobacco use. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting tobacco use. These data are used to recognize successes and to determine progress toward intended outcomes related to preventing tobacco use and exposure. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source(s)

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 11: Tobacco Use

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who report having smoked 100 cigarettes in their lifetime and are current smokers on every day or some days.

Denominator: Respondents aged ≥18 years who report ever or not ever smoking 100 cigarettes in their lifetime and report their current smoking status (excluding unknowns and refusals).

Survey Question(s)

11.1 Have you smoked at least 100 cigarettes in your entire life?

11.2 Do you now smoke cigarettes every day, some days or not at all?

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR*. 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

[2] HHS. *The health consequences of smoking: a report of the Surgeon General*. Atlanta, GA: CDC; 2004.

[3] HHS. *Women and smoking: a report of the Surgeon General*. Washington, DC: GPO; 2001. Available at: http://www.surgeongeneral.gov/library/womenandtobacco/

[4] NCI. *Smoking and Tobacco Control Monograph No. 10: Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency*. (NIH Publication No. 99-4645). Bethesda, MD: National Cancer Institute, 1999.

Performance Measure O-7	Measurable improvements in healthful eating, physical activity, and tobacco use.
Indicator O-7.4	Cigarette smoking among youth.

Rationale for Selecting This Indicator

Cigarette smoking causes approximately 440,000 deaths in the United States each year, making it the nation's leading preventable cause of death.[1] Tobacco use begins primarily during adolescence; almost 90% of adult smokers began by age 18 years.[2] Each day, more than 5,000 youth try their first cigarette.[3] Young people who are established smokers are at high risk of becoming addicted to cigarettes, increasing the likelihood they will use tobacco products throughout adulthood and subsequently be at risk for tobacco-related diseases such as lung cancer, heart disease, and emphysema.[4] Additionally, exposure to secondhand smoke can lead to lung cancer and heart disease in adults and to health problems such as asthma, sudden infant death syndrome, and lower respiratory infections in children.[5,6,7] A reduction in cigarette smoking by young people represents measurable improvement in tobacco use and may help to prevent tobacco related diseases, including diabetes complications and asthma exacerbations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward intermediate outcomes related to reductions in tobacco use. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting tobacco use by young people. These data are used to recognize successes and to determine progress toward intended outcomes related to preventing tobacco use and exposure. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)
Tobacco Use Section

How Indicator Is Measured

Numerator: Respondents in grades 9–12 who report having smoked a cigarette on ≥ 1 day during the past 30 days.

Denominator: Respondents in grades 9–12 who report having or not having smoked a cigarette on ≥ 1 day during the past 30 days (excluding those who did not answer).

Survey Question(s)

30. During the past 30 days, on how many days did you smoke cigarettes?

The above question is question 10 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR*. 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

[2] HHS. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: CDC; 1994.

[3] SAMHSA. *Summary of findings from the 2000 National Household Survey on Drug Abuse*. (DHHS Pub. No. (SMA) 01-3549). Rockville, MD: HHS; 2001. Available at www.samhsa.gov/news/click3_frame.html

[4] Jackson C & Dickinson D. Cigarette consumption during childhood and persistence of smoking through adolescence. *Archives of Pediatric & Adolescent Medicine.* 2004;158(11):1050-6.

[5] HHS. *The health consequences of smoking: a report of the Surgeon General*. Atlanta, GA: CDC; 2004.

[6] HHS. *Women and smoking: a report of the Surgeon General*. Washington, DC: GPO; 2001. Available at: http://www.surgeongeneral.gov/library/womenandtobacco/

[7] NCI. *Smoking and Tobacco Control Monograph No. 10: Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency*. (NIH Publication No. 99-4645). Bethesda, MD: National Cancer Institute, 1999.

Performance Measure O-8	Slowed upward trend of overweight and obesity in Steps communities.
Indicator O-8.1	Prevalence of overweight or obesity among adults aged 18 or older.

Rationale for Selecting This Indicator

The United States is experiencing a rising prevalence of overweight and obesity that has reached epidemic proportions among men and women of all ages, races, and ethnic groups.[1] In 2000, an estimated 65% of adults were overweight or obese.[2] Body Mass Index (BMI) is a measure of weight in relation to height that is frequently used as a screening tool to identify possible weight problems for adults. Although it does not measure body fat directly, it is a reliable indicator of total body fat.[3] Having a BMI of 25 or greater (indicating either overweight or obesity) is a risk factor for high blood pressure, high cholesterol, heart disease, diabetes, several forms of cancer, and other chronic health problems.[4] Both modest and large weight gains are associated with increased risk of disease.[5] Slowing the rate of increase in prevalence of overweight or obesity may contribute to a reduction of overweight- or obesity-related health problems, including type 2 diabetes and its complications.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to slowing the upward trend of overweight and obesity. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting reductions in overweight and obesity. These data are used to recognize successes and to determine progress toward intended outcomes related to preventing overweight and obesity. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source(s)

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 13: Demographics

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who have a body mass index (BMI) ≥25.0 kg/m² calculated from self-reported weight and height.

Denominator: Respondents aged ≥18 years for whom BMI can be calculated from their self-reported weight and height (excluding unknowns or refusals to provide weight or height).

Survey Question(s)

13.10 How much do you weigh without shoes?

13.11 About how tall are you without shoes?

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] Eberhardt MS, Ingram DD, Makuc DM, et al. *Urban and rural health chartbook: health, United States, 2001.* Hyattsville, MD: NCHS; 2001.

[2] Flegal KM, Carroll MD, Ogden CL & Johnson CL. Prevalence and trends in obesity among US adults, 1999-2000. *JAMA.* 288:1723-7;2002.

[3] CDC. *BMI – body mass index: about BMI for adults.* Atlanta, GA: HHS, CDC, 2006. Available at http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm

[4] NHLBI. *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults.* (NIH Publication No. 98-4083). NIH; 1998. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

[5] Ford ES, Williamson DF & Liu S. *Weight change and diabetes incidence: findings from a national cohort of US adults*. *Am J Epidemiol*. 1997;146(3):214-22.

Performance Measure O-8	Slowed upward trend of overweight and obesity in Steps communities.
Indicator O-8.2	Obesity prevalence among adults aged 18 or older.

Rationale for Selecting This Indicator

The United States is experiencing a rising prevalence of overweight and obesity that has reached epidemic proportions among men and women of all ages, races, and ethnic groups.[1] In 2000, an estimated 31% of adults were obese.[2] Body Mass Index (BMI) is a measure of weight in relation to height that is frequently used as a screening tool to identify possible weight problems for adults. Although it does not measure body fat directly, it is a reliable indicator of total body fat.[3] Having a BMI of 25 or greater (indicating either overweight or obesity) is a risk factor for high blood pressure, high cholesterol, heart disease, diabetes, several forms of cancer, and other chronic health problems.[4] Furthermore, obese adults (those with a BMI of 30 or greater) have a 50 to 100 percent increased risk of premature death from all causes compared to adults with a normal weight (BMI in the range of 20 – 25).[5] In 2000, obesity was associated with an estimated 111,909 deaths.[6] Slowing the rate of increase in prevalence of obesity may contribute to a reduction of obesity-related health problems, including type 2 diabetes and its complications.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to slowing the upward trend of overweight and obesity. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting reductions in overweight and obesity. These data are used to recognize successes and to determine progress toward intended outcomes related to preventing overweight and obesity. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 13: Demographics

How Indicator Is Measured

Numerator: Respondents aged ≥18 years who have a body mass index (BMI) ≥30.0 kg/m² calculated from self-reported weight and height.

Denominator: Respondents aged ≥18 years for whom BMI can be calculated from their self-reported weight and height (excluding unknowns or refusals to provide weight or height).

Survey Question(s)

13.10 How much do you weigh without shoes?

13.11 About how tall are you without shoes?

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] Eberhardt MS, Ingram DD, Makuc DM, et al. *Urban and rural health chartbook: health, United States, 2001.* Hyattsville, MD: NCHS; 2001.

[2] Flegal KM, Carroll MD, Ogden CL & Johnson CL. Prevalence and trends in obesity among US adults, 1999-2000. *JAMA.* 288:1723-7;2002.

[3] CDC. *BMI – body mass index: about BMI for adults.* Atlanta, GA: HHS, CDC, 2006. Available at http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm

[4] NHLBI. *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults.* (NIH Publication No. 98-4083). NIH; 1998. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

[5] HHS. *The Surgeon General's call to action to prevent and decrease overweight and obesity*. Rockville, MD: HHS, Public Health Service, Office of the Surgeon General; 2001. Available at http://www.surgeongeneral.gov/topics/obesity/

[6] Flegal KM, Graubard BI, Williamson DF, Gail MH. Excess deaths associated with underweight, overweight, and obesity. *JAMA.* 2005;293:1861-1867.

Performance Measure O-8	Slowed upward trend of overweight and obesity in Steps communities.
Indicator O-8.3	Overweight prevalence among youth

Rationale for Selecting This Indicator

The United States is experiencing a rising prevalence of overweight and obesity that has reached epidemic proportions among men and women of all ages, races, and ethnic groups.[1] In 2000, an estimated 16% of young people aged 6-19 years were overweight.[2] In 2001-2002 there were more than twice as many overweight children and three times as many overweight adolescents as there were in 1980.[3] Body Mass Index (BMI) is a measure of weight in relation to height that is recommended as a screening tool to identify possible weight problems for children. Although it does not measure body fat directly, it is a reliable indicator of total body fat for most children and adolescents.[4] For young people under age 20, BMI is age- and sex-specific; children and adolescents are considered overweight if their BMI is in the 95th percentile of the CDC BMI-for-age growth chart for their age and sex.[4] Overweight young people have more cardiovascular risk factors (including high cholesterol and high blood pressure) than young people with normal weight.[5] Additionally, overweight adolescents are at greater risk of becoming overweight or obese as adults[6] and experiencing related problems such as high blood pressure, high cholesterol, heart disease, diabetes, and several forms of cancer.[7] Slowing the rate of increase in prevalence of overweight among young people may contribute to a reduction of overweight- and obesity-related health problems, including type 2 diabetes and its complications.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to slowing the upward trend of overweight and obesity. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting reductions in the number of overweight young people. These data are used to recognize successes and to determine progress toward intended outcomes related to preventing overweight and obesity. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Youth Risk Behavior Survey (YRBS)
Demographics Section

How Indicator Is Measured

Numerator: Respondents in grades 9–12 with a body mass index (BMI) at or above the sex- and age-specific 95th percentile from CDC Growth Charts: United States.

Denominator: Respondents in grades 9–12 who answer height and weight questions (excluding those who did not answer).

Survey Question(s)

6. How tall are you without your shoes on?

7. How much do you weigh without your shoes on?

The above questions are questions 6 and 7 on the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] Eberhardt MS, Ingram DD, Makuc DM, et al. *Urban and rural health chartbook: health, United States, 2001*. Hyattsville, MD: NCHS; 2001.
[2] Ogden CL, Flegal KM, Carroll MD & Johnson CL. Prevalence and trends in overweight among US children and adolescents, 1999-2000. *JAMA*. 2002;288:1728-1732.
[3] Hedley AA, Ogden CL, Johnson CL, Carroll MD, Curtin LR & Flegal KM. Prevalence of overweight and obesity among US children, adolescents, and adults, 1999-2002. JAMA. 2004;291(23):2847-2850.
[4] CDC. *BMI – body mass index: about BMI for children and teens.* Atlanta, GA: HHS, CDC, 2006. Available at http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm
[5] Freedman DS, Dietz WH, Srinivasan SR & Berenson GS. The relation of overweight to cardiovascular risk factors among children and adolescents: the Bogalusa Heart Study. *Pediatrics*. 1999;103:1175–1182.
[6] Whitaker RC, Wright JA, Pepe MS, Seidel KD & Dietz WH. Predicting obesity in young adulthood from childhood and parental obesity. *New England Journal of Medicine*. 1997;37(13):869–873.
[7] NHLBI. *Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults.* (NIH Publication No. 98-4083). NIH; 1998. Available at: http://www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.pdf

Performance Measure O-9	Reduced hospitalizations due to diabetes complications and asthma exacerbations.
Indicator O-9.1	Hospitalization with asthma among adults aged 18 or older.

Rationale for Selecting This Indicator

Asthma affects almost 20 million people, or 7% of the U.S. population.[1] Asthma is responsible for about 500,000 hospitalizations,[2] 5,000 deaths,[2] and 134 million days of restricted activity[3] a year. Effective asthma self-management can reduce morbidity among children and adults.[4] An asthma exacerbation severe enough to require hospitalization or a visit to the emergency department may indicate 1) a lack of access to medical care for diagnosis, treatment, and monitoring, 2) inadequate long-term management of asthma, or 3) inadequate treatment plans for handling asthma exacerbations.[4]

The survey items used to collect data on this indicator are proxy measures for data on asthma-related hospitalizations. It is often difficult and expensive to collect timely data about hospitalization at the local level. Therefore, the number of health care visits for urgent treatment of worsening asthma symptoms is used instead as a proxy measure. A reduction in the number of these visits probably indicates reductions in asthma-related exacerbations and hospitalizations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to reductions in asthma exacerbations. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting asthma. These data are used to recognize successes and to determine progress toward intended outcomes related to reduced exacerbations of asthma. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)
Core Section 9: Asthma; Module 9: Adult Asthma History

How Indicator Is Measured

Numerator: Respondents aged ≥ 18 years who report having visited an emergency room or urgent care center because of their asthma or having seen a doctor, nurse, or other health professional for urgent treatment of worsening asthma symptoms in the past 12 months.

Denominator: Respondents aged ≥18 years who report ever told by a doctor or health professional that they have asthma and have had an episode of asthma or an asthma attack in the past 12 months (excluding unknowns and refusals).

Survey Question(s)

9.1 Have you ever been told by a doctor, nurse, or other health professional that you had asthma? (Core Section 9: Asthma)

9.2 Do you still have asthma? (Core Section 9: Asthma)

2. During the past 12 months, have you had an episode of asthma or an asthma attack? (Module 9: Adult Asthma History)

3. During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma? (Module 9: Adult Asthma History)

4. [If one or more visits to Q3, fill in "Besides those emergency room visits,"] During the past 12 months, how many times did you see a doctor, nurse or other health professional for urgent treatment of worsening asthma symptoms? (Module 9: Adult Asthma History)

Special Instructions

None

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] CDC. *National Health Interview Survey data: 2003 asthma data* [online]. HHS, CDC, National Center for Environmental Health. 2003. Available at http://www.cdc.gov/asthma/NHIS/default.htm.
[2] NHLBI. *Data Fact Sheet: Asthma Statistics.* Bethesda, MD: NIH, Public Health Service PHS; 1999.
[3] Collins, JG. *Prevalence of selected chronic conditions: United States 1990-1992*. National Center for Health Statistics: Vital Health Statistics. 10(194); 1997. Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_194.pdf
[4] NAEPP. *Clinical practice guidelines: expert panel report 2: guidelines for the diagnosis and management of asthma.* (NIH Publication No. 97-4051). NIH, NHLBI; 1997. Available at: http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf

Performance Measure O-9	Reduced hospitalizations due to diabetes complications and asthma exacerbations.
Indicator O-9.2	Hospitalization with asthma among youth.

Rationale for Selecting This Indicator

Asthma affects over 6 million young people, or 8.5% of the U.S. population under the age of 18.[1] Asthma is the third leading cause of hospitalization for children under 15, is a leading cause of school absenteeism, and often results in unnecessary restriction of activities for young people.[2,3] Effective asthma self-management can reduce morbidity among children and adults.[4] An asthma exacerbation severe enough to require hospitalization or a visit to the emergency department may indicate 1) a lack of access to medical care for diagnosis, treatment, and monitoring, 2) inadequate long-term management of asthma, or 3) inadequate treatment plans for handling asthma exacerbations.[4]

The survey items used to collect data on this indicator are proxy measures for data on asthma-related hospitalizations. It is often difficult and expensive to collect timely data about hospitalization at the local level. Therefore, the number of health care visits for urgent treatment of worsening asthma symptoms is used instead as a proxy measure. A reduction in the number of these visits probably indicates reductions in asthma-related exacerbations and hospitalizations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to reductions in asthma exacerbations. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting asthma in young people. These data are used to recognize successes and to determine progress toward intended outcomes related to reduced exacerbations of asthma. Lessons are shared with all Steps communities and with other interested public health programs.

Data Source

2007 Steps Youth Risk Behavior Survey (Steps YRBS)

How Indicator Is Measured

Numerator: Respondents in grades 9-12 who report still having asthma and visiting an emergency room or urgent care center because of their asthma in the past 12 months.

Denominator: Respondents in grades 9-12 who report still having asthma.

Survey Question(s)

36. Has a doctor or nurse ever told you that you have asthma?

37. Do you still have asthma?

38. During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma?

Note: The numbers above refer to the 2007 Steps YRBS questionnaire, a short version of the core YRBS questionnaire that contains questions relevant to the Steps Program focus areas. Questions 36 and 37 are questions 86 and 87 on the core YRBS questionnaire; question 38 is not included on the core YRBS questionnaire.

Special Instructions

None

Data Collection Schedule

Collected biennially

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

Agency for Healthcare Research and Quality (AHRQ), *National Healthcare Disparities Report* and *National Healthcare Quality Report*: http://www.qualitytools.ahrq.gov/disparitiesreport/browse/browse.aspx and http://www.qualitytools.ahrq.gov/qualityreport/browse/browse.aspx

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

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[1] CDC. *National Health Interview Survey data: 2003 asthma data* [online]. HHS, CDC, National Center for Environmental Health. 2003. Available at http://www.cdc.gov/asthma/NHIS/default.htm

[2] Popovic JR. *1999 National hospital discharge survey: annual summary with detailed diagnosis and procedure data*. National Center for Health Statistics: Vital Health Statistics. 13(151); 2001. Available at: http://www.cdc.gov/nchs/data/series/sr_13/sr13_151.pdf

[3] NHLBI. *National asthma education prevention program resolution on asthma management at school.* NIH, NHLBI; 2005. Available at http://www.nhlbi.nih.gov/health/public/lung/asthma/resolut.htm

[4] NAEPP. *Clinical practice guidelines: expert panel report 2: guidelines for the diagnosis and management of asthma.* (NIH Publication No. 97-4051). NIH, NHLBI; 1997. Available at: http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf

Performance Measure O-9	Reduced hospitalizations due to diabetes complications and asthma exacerbations.
Indicator O-9.3	Hospitalization with diabetes among adults aged 18 or older.

Rationale for Selecting This Indicator

An estimated 18.2 million Americans (6.3% of the population) have diabetes, and for 5.2 million of those people, their diabetes is undiagnosed.[1] Diabetes is the sixth leading cause of death in the United States[2] and can lead to serious complications such as heart disease, stroke, high blood pressure, blindness, kidney damage, and lower-limb amputations.[3] Each year approximately 500,000 hospital discharge abstracts list diabetes as the principal diagnosis, and 3.5 million hospital discharge abstracts list diabetes as at least one diagnosis.[4] A diabetes complication severe enough to require hospitalization may indicate a lack of access to quality healthcare or inadequate adherence to a diabetes self-management plan.

The survey items used to collect data on this indicator are proxy measures for data on diabetes-related hospitalizations. It is often difficult and expensive to collect timely data about hospitalization at the local level. Therefore, the number of health care visits for diabetes is used instead as a proxy measure. A reduction in the number of respondents with 5 or more health care visits per year for diabetes probably indicates reductions in diabetes-related complications and hospitalizations.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to reductions in diabetes complications. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions targeting diabetes. These data are used to recognize successes and to determine progress toward intended outcomes related to reduced complications of diabetes. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 5: Diabetes; Module 1: Diabetes

How Indicator Is Measured

Numerator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant) who have seen a doctor, nurse, or other health professional for their diabetes ≥5 times in the past 12 months.

Denominator: Respondents aged ≥18 years ever told by a doctor that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).

Survey Question(s)

5.1 Have you ever been told by a doctor that you have diabetes? (Core Section 5: Diabetes)

7. About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes? (Module 1: Diabetes)

Special Instructions

Respondents who answer the diabetes core question 5.1 and indicate that they were told by a doctor they have diabetes (1. Yes) must be asked the six diabetes module questions listed in Appendix D. These six questions must be asked in the prescribed order even if not all the questions in the BRFS diabetes module are used. If the six diabetes module questions not required for the core performance measures are not asked, the data columns for those questions should be filled in with the code for refusal.

Data Collection Schedule

Collected annually

Resources

None

Consistency with relevant agencies, initiatives, and guidance documents

The Guide to Community Preventive Services: http://www.thecommunityguide.org/

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2003.* Rev ed. Atlanta, GA: HHS, CDC; 2004. Available at http://www.cdc.gov/diabetes/pubs/factsheet.htm

[2] Anderson RN & Smith BL. Deaths: leading causes for 2002. National vital statistics reports; vol 53 no 17. Hyattsville, MD: National Center for Health Statistics; 2005. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_17.pdf

[3] National Diabetes Data Group, ed. *Diabetes in America, 2nd ed* (NIH Publication No. 95-1468). Washington, DC: HHS, NIH, National Institute of Diabetes and Digestive and Kidney Diseases; 1995

[4] CDC. Indicators for chronic disease surveillance. *MMWR*. 2004;53(RR11):1-6. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5311a1.htm

Performance Measure O-10	Improved health-related quality of life.
Indicator O-10.1	Mean number of Healthy Days among adults aged 18 or older.

Rationale for Selecting This Indicator

Health-related quality of life is "an individual's or group's perceived physical and mental health over time."[1] This is consistent with the World Health Organization's definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[1,2] Health-related quality of life is a particularly important measure for chronic disease surveillance.[1] Research shows that the Healthy Days measure (i.e. the number of days per month when an individual's physical and mental health were both good) is a valid and reliable measure of health-related quality of life.[1] Healthy Days correlate as expected with physical activity, obesity and overweight, tobacco use, and access to healthcare.[1] Healthy Days can also serve as a proxy measure for the perceived burden of symptoms associated with chronic health conditions.[1] This indicator captures all of the long-term outcomes of the Steps Program: an increase in the mean number of Healthy Days may reflect improved self-management of diabetes and asthma, a slowed upward trend of overweight and obesity, reduced diabetes complications and asthma exacerbations, and progress toward improved health-related quality of life.

Intended Use of Data

Steps communities use site-specific data for program planning, data-driven decision making, and local evaluation. The Centers for Disease Control and Prevention (CDC) use these data to track progress toward long-term outcomes related to improved health-related quality of life. CDC also uses the data to make data-driven decisions regarding priorities for technical assistance related to the selection, implementation, and evaluation of interventions that address multiple diseases and risk factors. These data are used to recognize successes and to determine progress toward intended outcomes across multiple diseases and risk factors. Lessons learned are shared with all Steps communities and with other interested public health programs.

Data Source(s)

2005 Behavioral Risk Factor Survey (BRFS)

Core Section 2: Healthy Days

How Indicator Is Measured

Numerator: Mean number of healthy days in the past 30 days.

Denominator: Respondents aged ≥18 years who report number of days in the past 30 days that their physical and mental health were not good (including zero; excluding unknowns and refusals).

Survey Question(s)

2.1 Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

2.2 Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Special Instructions

The methodology used to calculate data for this indicator is based on the methodology presented in the report "Measuring Healthy Days" (see Resources section)

Data Collection Schedule

Collected annually

Resources

Measuring Healthy Days
http://www.cdc.gov/hrqol/monograph.htm.

Consistency with relevant agencies, initiatives, and guidance documents

Centers for Disease Control and Prevention (CDC), *FY 2005 Performance Plan*: http://www.cdc.gov/od/perfplan/Index.htm

The Community Indicators Handbook: http://www.communityinitiatives.com/pubs/indicats.html

The Future of the Public's Health in the 21st Century, The Institute of Medicine (IOM): http://www.iom.edu/report.asp?id=4304

Government Performance and Results Act (GPRA): http://www.whitehouse.gov/omb/mgmt-gpra/index.html

Healthy People 2010: http://www.healthypeople.gov/default.htm

Indicators for Chronic Disease Surveillance: http://www.cdc.gov/mmwr/PDF/RR/RR5311.pdf

Secretary Mike Leavitt's 500-Day Plan: http://www.hhs.gov/secretaryspage.html and http://www.hhs.gov/500DayPlan/500DayPlan.pdf

Steps Program Announcements: http://www.healthierus.gov/steps/2003grants.html and http://www.healthierus.gov/steps/2004grants.html

[1] CDC. *Measuring healthy days*. Atlanta, GA: CDC; 2000.
[2] Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

Appendix D

Behavioral Risk Factor Survey (BRFS) and Youth Risk Behavior Survey (YRBS) Questions Required for Reporting on Core Performance Measures

To collect data needed for reporting on outcome measures, Steps communities participate in the Behavioral Risk Factor Surveillance System (BRFSS) annually and the Youth Risk Behavior Surveillance System (YRBSS) biennially. This appendix provides information about the BRFS and YRBS questions required for reporting on the core performance measures.

The first section of the appendix, *Summary of Survey Items Required for Reporting on Core Performance Measures Outcome Indicators*, is a one page summary of required survey items. This summary includes the name and year of the survey (e.g., 2005 Behavioral Risk Factor Survey), the sections or modules from which questions are drawn, and the question number for each question. This summary does **not** include the actual questions.

The second section of the appendix, *Questions Required for Reporting on Core Performance Measures Outcome Indicators*, is a detailed list of all required questions. This list includes the name and year of the survey, the sections or modules from which questions are drawn, the item number for each question, and the actual question.

Summary of Survey Items Required for Reporting on Outcome Indicators

2005 Behavioral Risk Factor Survey
http://www.cdc.gov/brfss/questionnaires/questionnaires.htm

Core Sections	Question Number
Section 2: Healthy Days	2.1, 2.2
Section 3: Health Care Access	3.1, 3.2, 3.3, 3.4
Section 5: Diabetes	5.1
Section 9: Asthma	9.1, 9.2
Section 11: Tobacco Use	11.1, 11.2, 11.13
Section 13: Demographics	13.10, 13.11
Section 17: Fruits and Vegetables	17.1, 17.2, 17.3, 17.4, 17.5, 17.6
Section 18: Physical Activity	18.2, 18.3, 18.4, 18.5, 18.6, 18.7

Optional Modules	Question Number
Module 1: Diabetes	4, 5, 7, 8, 9, 10
Module 9: Adult Asthma History	2, 3, 4, 5, 7
Module 21: Smoking Cessation	2, 3

2007 Youth Risk Behavior Survey or **2007 Steps Youth Risk Behavior Survey**[*]
http://www.cdc.gov/HealthyYouth/yrbs/index.htm

Sections	Core YRBS Question Number	Steps YRBS Question Number
Demographics	6, 7	6, 7
Tobacco Use	30, 35	10, 15
Food	72, 73, 74, 75, 76, 77	23, 24, 25, 26, 27, 28
Physical Activity	80, 81	30, 31
Other Health Topics	86, 87	35, 36, 37, 38

[*] Many Steps communities use a modified version of the core Youth Risk Behavior Survey (YRBS) questionnaire. This survey only includes sections directly relevant to the Steps Program. Question numbers are provided for both the core YRBS questionnaire and the Steps YRBS questionnaire. Please note that the Steps YRBS questionnaire includes two additional questions in the Other Health Topics section.

Questions Required for Reporting on Outcome Indicators

2005 Behavioral Risk Factor Survey

Core Section 2: Healthy Days

2.1 Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

2.2 Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Core Section 3: Health Care Access

3.1 Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

3.2 Do you have one person you think of as your personal doctor or health care provider?

3.3 Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?

3.4 About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

Core Section 5: Diabetes

5.1 Have you ever been told by a doctor that you have diabetes?

Core Section 9: Asthma

9.1 Have you ever been told by a doctor, nurse, or other health professional that you had asthma?

9.2 Do you still have asthma?

Core Section 11: Tobacco Use

11.1 Have you smoked at least 100 cigarettes in your entire life?

11.2 Do you now smoke cigarettes every day, some days or not at all?

11.3 During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

Core Section 13: Demographics

13.10 How much do you weigh without shoes?

13.11 About how tall are you without shoes?

Core Section 17: Fruits and Vegetables

17.1 How often do you drink fruit juices such as orange, grapefruit, or tomato?

17.2 Not counting juice, how often do you eat fruit?

17.3 How often do you eat green salad?

17.4 How often do you eat potatoes not including french fries, fried potatoes, or potato chips?

17.5 How often do you eat carrots?

17.6 Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat? (Example: A serving of vegetables at both lunch and dinner would be two servings.)

Core Section 18: Physical Activity

18.2 Now, thinking about the moderate physical activities you do … in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate?

18.3 How many days per week do you do these moderate activities for at least 10 minutes at a time?

18.4 On days that you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

18.5 Now, thinking about the vigorous physical activities you do … in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?

18.6 How many days per week do you do these vigorous activities for at least 10 minutes at a time?

18.7 On days that you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

Module 1: Diabetes

4. About how often do you check your blood for glucose or sugar? Include times when checked by a family member or friend, but do not include times when checked by a health professional.

5. About how often do you check your feet for any sores or irritations? Include times when checked by a family member or friend, but do not include times when checked by a health professional.

7. About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes?

8. A test for "A one C" measures the average level of blood sugar over the past three months. About how many times in the past 12 months has a doctor, nurse or other health professional checked you for "A one C"?

9. About how many times in the past 12 months has a health professional checked your feet for any sores or irritations?

10. When was the last time you had an eye exam in which the pupils were dilated? This would have made you temporarily sensitive to bright light.

Module 9: Adult Asthma History

2. During the past 12 months, have you had an episode of asthma or an asthma attack?
3. During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma?
4. [If one or more visits to Q3, fill in “Besides those emergency room visits,”] During the past 12 months, how many times did you see a doctor, nurse or other health professional for urgent treatment of worsening asthma symptoms?
5. During the past 12 months, how many times did you see a doctor, nurse, or other health professional for a routine checkup for your asthma?
7. Symptoms of asthma include cough, wheezing, shortness of breath, chest tightness and phlegm production when you don’t have a cold or respiratory infection. During the past 30 days, how often did you have any symptoms of asthma?

Module 21: Smoking Cessation

2. In the past 12 months, how many times have you seen a doctor, nurse, or other health professional to get any kind of care for yourself?
3. In the past 12 months, on how many visits were you advised to quit smoking by a doctor, or other health provider?

2007 Youth Risk Behavior Survey (2007 Steps Youth Risk Behavior Survey)[†]

6.	(6)	How tall are you without your shoes on?
7.	(7)	How much do you weigh without your shoes on?
30.	(10)	During the past 30 days, on how many days did you smoke cigarettes?
35.	(15)	During the past 12 months, did you ever try to quit smoking cigarettes?
72.	(23)	During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks)
73.	(24)	During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)
74.	(25)	During the past 7 days, how many times did you eat green salad?
75.	(26)	During the past 7 days, how many times did you eat potatoes? (Do not count French fries, fried potatoes, or potato chips.)
76.	(27)	During the past 7 days, how many times did you eat carrots?
77.	(28)	During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes or carrots.)
80.	(30)	During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)
81.	(31)	On an average school day, how many hours do you watch TV?
86.	(36)	Has a doctor or nurse ever told you that you have asthma?
87.	(37)	Do you still have asthma?
N/A	(38)	During the past 12 months, how many times did you go to an emergency room or urgent care center because of your asthma?
N/A	(35)	Has a doctor or nurse ever told you that you have diabetes?

[†] Many Steps communities use a modified version of the core Youth Risk Behavior Survey (YRBS) questionnaire. This survey only includes sections directly relevant to the Steps Program. Question numbers are provided for both the core YRBS questionnaire and the Steps YRBS questionnaire. The first number refers to the core YRBS questionnaire. For reference, numbers to corresponding Steps YRBS questionnaire are provided in parenthesis.

Appendix E

Map to Behavioral Risk Factor Survey (BRFS) Report

The BRFS data that Steps communities need in order to report to the Steps Program Office are in a special report that CDC's Behavioral Risk Factor Surveillance System (BRFSS) staff send to each Steps community after the data are analyzed. To help Steps communities interpret these reports and select the data needed for reporting on the core performance measures, this appendix provides a map to the BRFS report. The map shows a sample BRFS report with explanations of the information contained in each part of the report.

Map of BRFS Report

1 This is the outcome indicator number from the Steps Core Performance Measures.

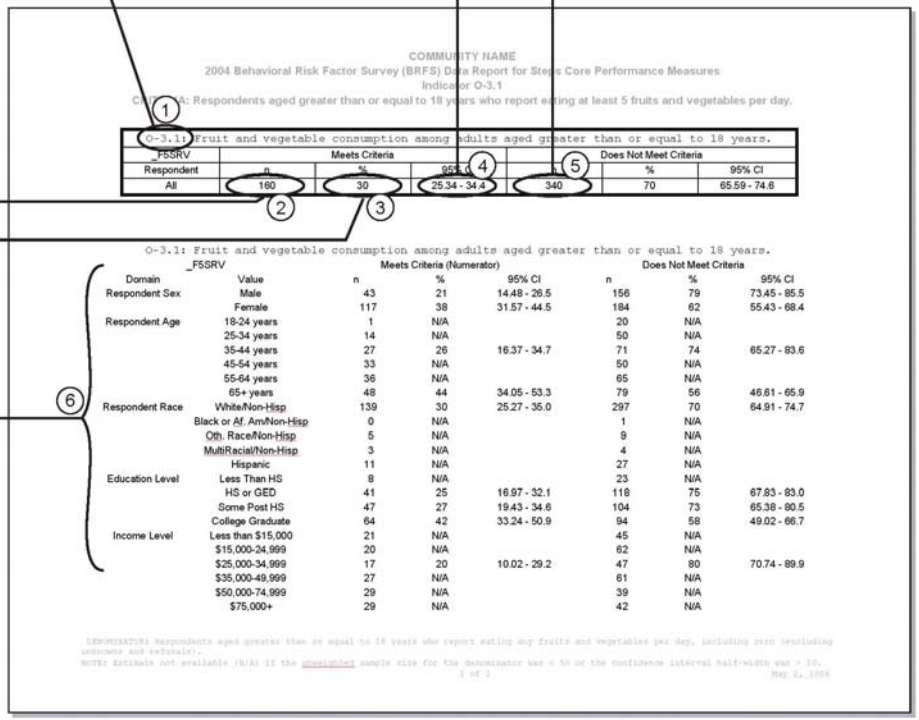
2 This is the total number of respondents who met the specified criteria for this indicator (i.e., respondents aged greater than or equal to 18 years who reported eating at least 5 fruits and vegetables per day).

3 This is the percentage of respondents that met the criteria for this indicator (i.e., the number of respondents aged greater than or equal to 18 years who reported eating at least 5 fruits and vegetables per day divided by the total number of respondents aged greater than or equal to 18 years who answered the question(s) for this indicator.

6 This section presents data for the same indicator by respondents' sex, age, race, education level, and income level. This information may be useful for local evaluation purposes. You may also want to provide some of this data in the "Contextual Information or Supplemental Data" section of the reporting templates.

4 The confidence intervals for specific statistics provide a range of values around the statistic where the "true" (population) statistic is expected to be located with a given level of certainty. This range of values is the 95% confidence interval for an estimate of the percentage of the population that meets the criteria defined by the question and indicator.

5 This is the number of respondents who did NOT meet the specified criteria for this indicator (i.e., respondents aged greater than or equal to 18 who did NOT report eating at least 5 fruits and vegetables per day).



COMMUNITY NAME
2004 Behavioral Risk Factor Survey (BRFS) Data Report for Steps Core Performance Measures
Indicator O-3.1
CASE DEFINITION: Respondents aged greater than or equal to 18 years who report eating at least 5 fruits and vegetables per day.

O-3.1: Fruit and vegetable consumption among adults aged greater than or equal to 18 years.

_FSSRV	Meets Criteria			Does Not Meet Criteria		
Respondent	n	%	95% CI	n	%	95% CI
All	160	30	25.34 - 34.4	340	70	65.59 - 74.6

O-3.1: Fruit and vegetable consumption among adults aged greater than or equal to 18 years.

_FSSRV		Meets Criteria (Numerator)			Does Not Meet Criteria		
Domain	Value	n	%	95% CI	n	%	95% CI
Respondent Sex	Male	43	21	14.48 - 26.5	156	79	73.45 - 85.5
	Female	117	38	31.57 - 44.5	184	62	55.43 - 68.4
Respondent Age	18-24 years	1	N/A		20	N/A	
	25-34 years	14	N/A		50	N/A	
	35-44 years	27	26	16.37 - 34.7	71	74	65.27 - 83.6
	45-54 years	33	N/A		50	N/A	
	55-64 years	36	N/A		65	N/A	
	65+ years	48	44	34.05 - 53.3	79	56	46.61 - 65.9
Respondent Race	White/Non-Hisp	139	30	25.27 - 35.0	297	70	64.91 - 74.7
	Black or Af. Am/Non-Hisp	0	N/A		1	N/A	
	Oth. Race/Non-Hisp	5	N/A		9	N/A	
	MultiRacial/Non-Hisp	3	N/A		4	N/A	
	Hispanic	11	N/A		27	N/A	
Education Level	Less Than HS	8	N/A		23	N/A	
	HS or GED	41	25	16.97 - 32.1	118	75	67.83 - 83.0
	Some Post HS	47	27	19.43 - 34.6	104	73	65.38 - 80.5
	College Graduate	64	42	33.24 - 50.9	94	58	49.02 - 66.7
Income Level	Less than $15,000	21	N/A		45	N/A	
	$15,000-24,999	20	N/A		62	N/A	
	$25,000-34,999	17	20	10.02 - 29.2	47	80	70.74 - 89.9
	$35,000-49,999	27	N/A		61	N/A	
	$50,000-74,999	29	N/A		39	N/A	
	$75,000+	29	N/A		42	N/A	

DENOMINATOR: Respondents aged greater than or equal to 18 years who report eating any fruits and vegetables per day, including zero (excluding unknowns and refusals).
NOTE: Estimate not available (N/A) if the unweighted sample size for the denominator was < 50 or the confidence interval half-width was > 10.

1 of 2 May 2, 2006

Appendix F

Map to Youth Risk Behavior Survey (YRBS) Report

The YRBS data that Steps communities need in order to report to the Steps Program Office are in a report that CDC's Youth Risk Behavior Surveillance System (YRBSS) staff send to each Steps community after the data are analyzed. To help Steps communities interpret these reports and select the data needed for reporting on the core performance measures, this appendix provides a map to the YRBS report. The map shows a sample YRBS report with explanations of the information contained in each part of the report.

Map of YRBS Report

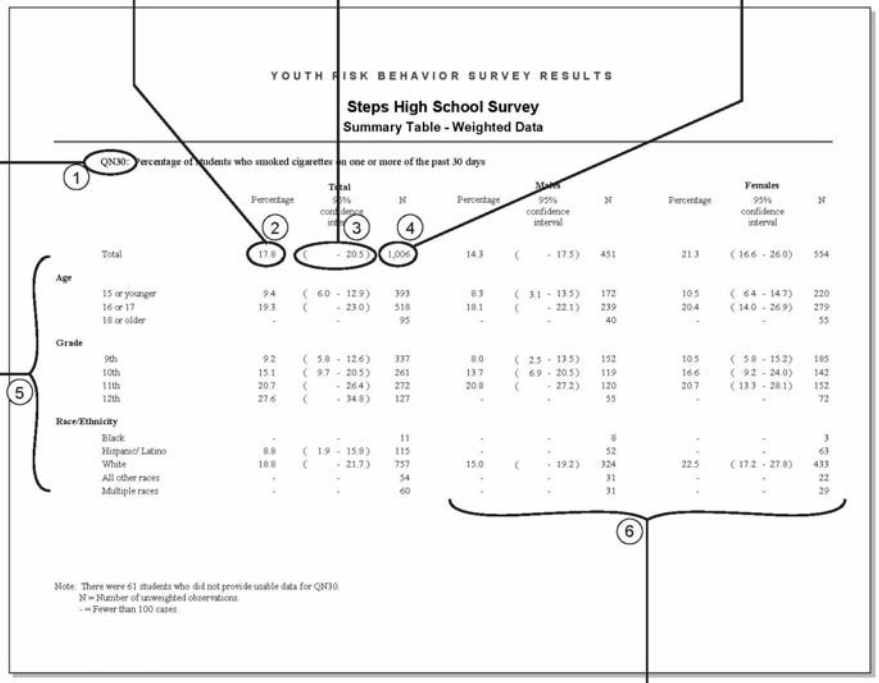
2 This is the percentage of respondents that met the criteria defined by the indicator (i.e., Percentage of students who smoked cigarettes on one or more of the past 30 days).

3 The confidence intervals for specific statistics provide a range of values around the statistic where the "true" (population) statistic is expected to be located with a given level of certainty. This range of values is the 95% confidence interval for an estimate of the percentage of the population that meets the criteria defined by the question and indicator.

4 N is the total number of respondents, or the denominator.

1 This is the YRBS label, or variable name, for the indicator.

5 This section presents data for the same indicator by respondents' age, grade, and race/ethnicity. This information may be useful for local evaluation purposes. You may also want to provide some of this data in the "Contextual Information or Supplemental Data" section of the reporting templates.



YOUTH RISK BEHAVIOR SURVEY RESULTS

Steps High School Survey

Summary Table - Weighted Data

QN30: Percentage of students who smoked cigarettes on one or more of the past 30 days

	Total			Male			Female		
	Percentage	95% confidence interval	N	Percentage	95% confidence interval	N	Percentage	95% confidence interval	N
Total	17.8	(- 20.5)	1,006	14.3	(- 17.5)	451	21.3	(16.6 - 26.0)	554
Age									
15 or younger	9.4	(6.0 - 12.9)	393	8.3	(3.1 - 13.5)	172	10.5	(6.4 - 14.7)	220
16 or 17	19.3	(- 23.0)	518	18.1	(- 22.1)	239	20.4	(14.0 - 26.9)	279
18 or older	-	-	95	-	-	40	-	-	55
Grade									
9th	9.2	(5.8 - 12.6)	337	8.0	(2.5 - 13.5)	152	10.5	(5.8 - 15.2)	185
10th	15.1	(9.7 - 20.5)	261	13.7	(6.9 - 20.5)	119	16.6	(9.2 - 24.0)	142
11th	20.7	(- 26.4)	272	20.8	(- 27.2)	120	20.7	(13.3 - 28.1)	152
12th	27.6	(- 34.8)	127	-	-	55	-	-	72
Race/Ethnicity									
Black	-	-	11	-	-	8	-	-	3
Hispanic/Latino	8.8	(1.9 - 15.8)	115	-	-	52	-	-	63
White	18.8	(- 21.7)	757	15.0	(- 19.2)	324	22.5	(17.2 - 27.8)	433
All other races	-	-	54	-	-	31	-	-	22
Multiple races	-	-	60	-	-	31	-	-	29

Note: There were 61 students who did not provide usable data for QN30.
N = Number of unweighted observations.
- = Fewer than 100 cases.

6 This section presents data for the same indicator by respondents' sex. This information may be useful for local evaluation purposes. You may also want to provide some of this data in the "Contextual Information or Supplemental Data" section of the reporting templates.

Appendix G

Steps to a HealthierUS Cooperative Agreement Program—Sources of Evidence for Program Planning and Implementation

Steps communities rely on current knowledge of what works in chronic disease prevention and health promotion in order to accelerate progress toward intended outcomes. By implementing evidence-based strategies, communities focus their efforts on the most effective interventions and demonstrate that funds are being used in the best way possible to reduce the burden of chronic disease in their communities. In doing so, communities draw from a wide range of sources of evidence.

This appendix lists sources of evidence relevant to Steps Program interventions. It is an optional tool that Steps communities may use to aid in program planning and implementation or to identify the evidence base for selected interventions. This list is not exhaustive or prescriptive, and communities are not limited to the sources on this list. The list includes the following information:

- Resource: The name of the resource, hyperlinked to the relevant web page
- Description: A brief description of relevant sources of evidence included in the resource
- Focus Areas: An indication of which Steps focus areas (i.e., obesity, diabetes, asthma, nutrition, physical activity, and tobacco use) the resource addresses
- Key Sectors: An indication of which resources address healthcare access and quality or school health

Steps to a HealthierUS Cooperative Agreement Program—Sources of Evidence for Program Planning and Implementation

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
101 Packets, National School Boards Association	Informational packets about selected school health issues available by mail. Physical Activity 101 & 201, Healthy Eating 101, Tobacco Use Prevention 101, and Asthma in Schools 101 contain recommendations about policies and practices.			x	x	x	x		x
Allies Against Asthma, University of Michigan	Resource bank includes resources to help implement asthma intervention programs.			x					
American Diabetes Association 2005 Clinical Practice Recommendations	Position statements on standards of medical care; diagnosis; care in school, day care, camp, and correctional institutions; and third party reimbursement for care and self management education. Also includes national standards for diabetes self management education.		x						x
American Heart Association Guide for Improving Cardiovascular Health at the Community Level	Goals, strategies and interventions to promote cardiovascular health through policy and environmental change on a community-wide basis.				x	x	x	x	x
Best Practice Initiative, Office of Public Health and Science, HHS	Best Practices from around the country include childhood obesity prevention initiative, breastfeeding initiative, tobacco control, and diabetes control.	x	x		x		x		
Best Practices for Comprehensive Tobacco Control Programs, CDC	Recommended strategies include school programs, cessation programs, enforcement, and counter-marketing.			x			x	x	x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Best Practices, National Institute to Improve Adolescent and Young Adult Health	Provides an overview and comprehensive listing of resources for Best Practices in substance use, nutrition and physical activity, and other areas of adolescent health.				x	x	x	x	x
Best Processes and Practices that Promote Community Change and Improvement, Community Tool Box, University of Kansas	12 best processes address topics such as organizational structure, leadership, strategic planning, and sustainability. Each best process includes the evidence base for why that process matters, case examples that describe how it has been applied, how-to tips and tools for putting it into practice, and other information and resources that can help promote its use.								
Better Practices for Youth Tobacco Cessation, American Journal of Health Behavior	Behavioral interventions based on social cognitive theory were effective in helping young smokers quit smoking.						x		x
Bright Futures in Practice: Nutrition, Georgetown University	Strategies and tools to help health professionals provide nutrition supervision (including screening, assessment, and counseling).	x	x		x	x		x	x
Building a Healthier Future Through School Health Programs, CDC	Chapter of CDC's Promising Practices in Chronic Disease Prevention and Control. Promising practices include: coordinate multiple components and use multiple strategies, coordinate the activities of health and education agencies and other organizations, implement CDC's school health guidelines, and use a program planning process to achieve health promotion goals.	x			x	x	x		x
CDC Guide to Breastfeeding Interventions	Evidence-based interventions to promote breastfeeding include: maternity care practices, support for breastfeeding in the workplace, peer support, educating mothers, professional support, media and social marketing.				x			x	

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Cessation Research Center, CDC	Cessation-focused resources developed and tested by state tobacco control programs, CDC Office on Smoking and Health (OSH) partner organizations, and other federal agencies.						x	x	
Changing the Scene: Improving the School Nutrition Environment, USDA	Guidelines and activities to examine school's nutrition environment, develop a plan for improvement, and put the plan into action.				x				
Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults, National Heart, Lung, and Blood Institute	Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults.	x	x		x	x		x	
Community Action Practices, CDC	Descriptions of interventions for implementation, training, or strategic planning that reflect current scientific recommendations for comprehensive tobacco control programs.						x		
Coordinated School Health Programs, CDC	Describes components of a coordinated school health program model including physical education, nutrition services, and health promotion for staff.				x	x	x	x	x
Division of Diabetes Treatment and Prevention: Best Practices, Indian Health Services	Best practice models for successful diabetes prevention, treatment and education practices in American Indian/Alaska Native communities. Strategies include case management; patient education; training providers & educators; community-wide prevention programs; and cultural awareness training for providers.	x	x		x	x		x	x
Exemplary and Promising, Safe, Disciplined, and Drug-Free Schools Programs, US Dept. of Education	Evaluations of educational programs. Recommends two curricula that address tobacco use specifically, several others that address alcohol, tobacco, and other drugs.						x		x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Fit, Healthy, and Ready to Learn: A School Health Policy Guide, National Association of State Boards of Education	Sample school health policies that reflect best practice and can be adapted to local use.	x		x	x	x	x	x	x
Food Marketing to Children and Youth: Threat or Opportunity, Institute of Medicine	Recommendations to guide the development of effective marketing and advertising strategies that promote healthier foods to children and youth. Recommendations include long-term, multi-faceted social marketing programs and policies to improve nutritional quality of foods sold and served at school.	x			x				x
Guide to Clinical Preventive Services, U.S. Preventive Services Task Force, AHRQ	Recommendations on screening, counseling, and preventive medication topics. Recommendations include diabetes and obesity screening in adults, diet and tobacco use counseling in primary care, and breastfeeding counseling and education.	x	x		x		x	x	
Guide to Community Preventive Services - Diabetes, Task Force on Community Preventive Services	Effective interventions include disease management, case management, and self management education at home and in community gathering places.		x						
Guide to Community Preventive Services - Obesity, Task Force on Community Preventive Services	Effective interventions include multi-component worksite interventions aimed at diet, physical activity, and cognitive change.	x							
Guide to Community Preventive Services - Physical Activity, Task Force on Community Preventive Services	Effective interventions to increase physical activity include community-wide campaigns, "point-of-decision prompts," individually adapted behavior change, school-based physical education, non-family social support, and creation or enhancement of access to places for physical activity.					x			

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Guide to Community Preventive Services - Tobacco Use, Task Force on Community Preventive Services	Effective interventions include smoking bans and restrictions, increasing price of tobacco products, mass media when combined with other interventions, provider reminder systems, patient telephone support (quit lines), and reducing out-of-pocket costs for effective treatment.						x		
Guidelines for After-School Physical Activity and Intramural Sport Programs, National Association for Sport & Physical Education	Guidelines for planning and implementing physical activity and intramural programming for children in grades K-12.					x			x
Guidelines for Comprehensive Programs to Promote Healthy Eating and Physical Activity, Association of State and Territorial Public Health Nutrition Directors	Provides sample activities, practices, and programs in seven areas: leadership, planning/management and coordination; environmental, systems, and policy change; mass communication; community programs and community development; programs for children and youth; health care delivery; and surveillance, epidemiology, and research.	x	x		x	x		x	x
Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People, CDC	Guidelines for school and community programs on policy, environment, physical education, health education, extracurricular activities, parental involvement, personnel training, health services, community programs, and evaluation.	x				x			x
Guidelines for School Health Programs to Prevent Tobacco Use and Addiction, CDC	Guidelines to help school personnel plan, implement, and assess educational programs and school policies to prevent tobacco use. Recommendations include developing and enforcing a school policy on tobacco use, providing prevention education and support for cessation, and involving parents/families.						x		x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Guidelines for School Health Programs to Promote Lifelong Healthy Eating, CDC	Summarizes strategies most likely to be effective in promoting healthy eating and provides nutrition education guidelines. Recommendations include nutrition education, adopting a coordinated school nutrition policy, and integrating school food service and nutrition education.	x	x		x				x
Guidelines for the Diagnosis and Management of Asthma National Asthma Education and Prevention Program, NIH	Clinical practice guidelines for diagnosis and management of asthma; provides information on treating asthma at all severity levels and stresses both clinical and self-management strategies.			x				x	
Health Policy Guide, Center for Health Improvement	Provides policy guidance and resources to support advocacy and decision-making at the state and local levels. Topics include asthma, physical activity, access to a nutritious diet, educating about healthy foods, preventing childhood obesity, tobacco advertising and sponsorship, environmental tobacco smoke, tobacco cessation strategies, and youth access.	x		x	x	x	x	x	x
Healthy School Food Policies: A Checklist, Urban & Environmental Policy Institute	Collection of innovative policies that have been adopted or proposed to improve school food. Policy options include improving food sold and served in schools; integrating food service with school education, health, and environmental missions; and improving food preparation, service, and eating environments.				x				x
Helping the Student with Diabetes Succeed, National Diabetes Education Program	Includes a set of practices that enable schools to ensure a safe learning environment for students with diabetes. Key practices include diabetes management plans for students and training for school staff.		x		x	x			x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Improving Childhood Asthma Outcomes in the United States: A Blueprint for Policy Action, RAND Corporation	Policy recommendations to promote swift diagnosis and effective treatment of childhood asthma, and protection from exposure to harmful environmental factors. Includes options for implementing recommended policies. Recommendations include teaching self-management skills, case management for high-risk children, and promoting asthma-friendly schools.			x				x	
Improving the Health of Adolescents & Young Adults: A Guide for States and Communities, CDC	Guide to help organizations through public health processes to address adolescent health issues. Focus is on process, but resources section does include recommended programs and interventions.	x				x	x		x
Key Strategies to Prevent Obesity, CDC Healthy Youth	Key strategies to promote physical activity and healthful eating at schools include the following: implementing coordinated school health programs, strengthening school nutrition and physical activity policies, implementing courses of study in health education and physical education, increasing opportunities for physical activity, and providing healthy school meals and other food options.	x			x	x			x
Making It Happen—School Nutrition Success Stories, CDC	Illustrates variety of approaches that schools have taken to improve student nutrition. Approaches grouped into six areas: establish nutrition standards for competitive foods, influence food & beverage contracts, make more healthful foods & beverages available, adopt marketing to promote healthful choices, limit access to competitive foods, and use fundraising activities/rewards that support health.				x				x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Managing Asthma in the School Environment, Indoor Air Quality Tools for Schools, U.S. Environmental Protection Agency	Strategies to manage asthma include school asthma management plans, asthma education programs, and using Indoor Air Quality (IAQ) Tools For Schools. IAQ kit helps schools personnel identify, solve, and prevent indoor air quality problems; includes 19-step management plan and checklists for the entire building.			x					
Managing Asthma: A Guide for Schools, National Heart, Lung, and Blood Institute	Guide to assist schools planning and/or maintaining an asthma management program. Management program should contain confidential list of students with asthma, policies and procedures for administering medication, actions for staff members, written action plans for students, and education about asthma.			x					x
Model Practice Database, National Association of County & City Health Officials	On on-line searchable collection of practices across public health areas including (but not limited to): chronic disease, access to care, community involvement, community assessment, disparities, and tobacco. Each model practice includes information on agency and community roles, costs, implementation and sustainability.	x	x	x	x	x	x	x	x
Moving into Action: Promoting Heart–Healthy and Stroke–Free Communities, CDC	Series of action items to help governors, state legislators, local officials, employers, and health care leaders promote heart–healthy and stroke–free communities.	x	x		x	x		x	x
National Diabetes Information Clearinghouse, National Institute of Diabetes, Digestive, and Kidney Diseases	Collection of diabetes information includes publications on diabetes, a searchable database of health education materials, and responses to questions.		x		x	x			
National Guideline Clearinghouse, Agency for Healthcare Research and Quality	Comprehensive database of evidence-based clinical practice guidelines and related documents. Includes related guidelines for all Steps diseases and risk factors.	x	x	x	x	x	x	x	x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Open Airways for Schools, American Lung Association	School-based asthma education for children with asthma includes recognizing and avoiding asthma symptoms and avoiding asthma triggers.			x					x
Physical Activity and Health, A Report of the Surgeon General	Recommends minimum amounts of physical activity. Includes summary of research on effectiveness of physical activity programs. Some successful interventions for adults in communities, worksites, health care settings, and at home. Effectiveness of interventions targeting PE in elementary schools.	x				x		x	x
Planet Health, Harvard Prevention Research Center on Nutrition and Physical Activity	An interdisciplinary curriculum focused on improving the health and well-being of sixth through eighth grade students while building and reinforcing skills in language, arts, math, science, social studies and physical education.	x	x		x	x			x
Policy and Environmental Change: New Directions for Public Health, Association of State and Territorial Directors of Health Promotion and Public Health Education and CDC	Findings from a study to gain a better understanding how public health departments engage in policy and environmental change initiatives. Recommendations include developing models of successful interventions and creating a searchable database of information and resources. No recommendations on specific programs/interventions.		x			x	x		x
Potentially Effective Interventions for Asthma, CDC	Describes community-based interventions for asthma control by target population (adults, children, health care providers) and intervention setting (home, healthcare settings, schools).			x				x	x
Promising Practices in Chronic Disease Prevention and Control: A Public Health Framework For Action, CDC	Recommended strategies, indicators, and program examples for diabetes, promoting healthy eating and physical activity, tobacco control, and school health.		x		x	x	x		x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Promoting Better Health for Young People through Physical Activity and Sports, CDC	Strategies to promote health and reduce obesity through lifelong participation in enjoyable and safe physical activity and sports including emphases on families, school programs, after school programs, sports and recreation programs, community structural environment, and media campaigns.	x				x			x
Promoting Physical Activity: A Guide for Community Action, CDC	Summary and ordering information for guide using social marketing and behavioral science approach to plan interventions to promote physical activity. Includes focus on addressing your target population's understanding and skills, the social networks, the physical environments in which they live and work, and the policies that most influence their actions.					x			
Research Tested Intervention Programs, National Cancer Institute	Summary information for research tested programs in areas including nutrition, physical activity, and tobacco control.				x	x	x		x
Resource Guide for Nutrition and Physical Activity Interventions to Prevent Obesity and Other Chronic Diseases, CDC	Topics cover obesity prevention and control (including caloric intake and expenditure), increased physical activity, improved nutrition (including increased breastfeeding and increased consumption of fruits and vegetables), and reduced television time.	x	x		x	x			
Resources to Improve Schools, Action for Healthy Kids	Resource clearinghouse for programs to improve nutrition and physical activity in schools. Includes links to resources and profiles of successful school-based programs.	x			x	x			x

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Role of Michigan Schools in Promoting Healthy Weight, Michigan Department of Education	Guidelines, recommendations and tools for schools to promote healthy weight among students. Strategies include coordinated school health team approach, healthy nutrition policies, opportunities for physical activity, nutrition education, family involvement, interventions for families with weight concerns, and safeguards for weight screening.	x			x	x			x
SAMSHA Model Programs, National Registry for Effective Programs	Evidence-based programs on tobacco and other drug use.						x		x
School Health Guidelines and Strategies, CDC	Series of guidelines documents that identify the school health program strategies most likely to be effective in promoting healthy behaviors among young people.		x	x	x	x	x		x
School Health Index: A Self-assessment and Planning Guide, CDC	Self-assessment and planning tool for schools to improve their health and safety policies and programs.		x	x	x	x	x	x	x
School Health Resource Database, National School Boards Association	Searchable database with resources, including sample policies, articles, and training tools, that address health issues affecting schools and students. Topic areas include tobacco, nutrition, physical activity, asthma, and family and community involvement.			x	x	x	x		x
Strategies for Addressing Asthma within a Coordinated School Health Program, CDC	Strategies include support systems for asthma-friendly schools, school health services, asthma education for students and staff, a safe and healthy school environment, physical education and activity for students with asthma, and coordinated school, community and family efforts.			x					

Resource	Description	Focus Areas						Key Sectors	
		Obesity / Overweight	Diabetes	Asthma	Nutrition	Physical Activity	Tobacco	Healthcare Access / Quality	School Health
Team Nutrition Days and Beyond: How-To Kit, USDA	How-to kit for implementing Team Nutrition activities including starting a garden, hosting a food festival, promoting events, and locating resources.				x				
Tobacco Cessation Guideline, Office of the Surgeon General	Consumer and clinician materials for treating tobacco use and dependence including clinical practice guidelines and a how-to guide for implementing programs and guidelines.						x	x	
Validated Health Educational Programs, Asthma and Allergy Foundation of America	Effective interventions include Asthma Care Training for Kids, Wee Wheezers, You Can Control Asthma, and Power Breathing.			x					
VERB Campaign, CDC	A multiethnic campaign combining paid advertisements with school and community promotions and Internet activities resulted in increased awareness and increased levels of physical activity for children ages 9-13.					x			

Appendix H

Glossary

Access to care

The extent to which care is available to a patient in case of need. There are several types of barriers to access to health services including funding, physical, programming, and personal barriers.

Source: Work Group for Community Health and Development at the University of Kansas. Developing and Increasing Access to Health and Community Services. Community Tool Box. Available at: http://ctb.ku.edu/tools/en/sub_section_main_1243.htm.

Accountability

The responsibility of program managers and staff to provide evidence to stakeholders and funding agencies that a program is effective, follows all legal and fiscal requirements, and has implemented or will implement the procedures and activities needed to produce the program's intended outcomes.

Source: MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. Introduction to program evaluation for comprehensive tobacco control programs. Atlanta (GA): Centers for Disease Control and Prevention; 2001. Available from http://www.cdc.gov/tobacco/evaluation_manual/Evaluation.pdf.

Behavioral Risk Factor Surveillance System (BRFSS)

A telephone survey conducted by the departments of health of all 50 states, the District of Columbia, and three territories with assistance from CDC. The BRFSS is the primary source of information for states and the nation on the health-related behaviors of adults and includes questions related to behaviors associated with preventable chronic diseases, injuries, and infectious diseases.

Source: www.cdc.gov/brfss/index.htm.

Calculated Variable

A variable created by combining several variables from the data file.

Source: http://www.cdc.gov/BRFSS/technical_infodata/surveydata/2005.htm#survey

Data

Documented information or evidence of any kind.

Source: MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. Introduction to program evaluation for comprehensive tobacco control programs. Atlanta (GA): Centers for Disease Control and Prevention; 2001. Available from http://www.cdc.gov/tobacco/evaluation_manual/Evaluation.pdf.

Data sources

The persons, documents, products, activities, events, or records from which the data are obtained.

Source: Wheeler P, Haertel G, Scriven M. (1992). Teacher Evaluation Glossary, Kalamazoo, MI: CREATE Project, The Evaluation Center, Western Michigan University.

Evaluation (see Program Evaluation)

Evidence-based public health

Evidence-based public health is the process of using evidence-based interventions that are compatible with community preferences in order to improve the health of populations. The evidence base for interventions may include scientific evidence from a wide range of disciplines and/or practice-based wisdom.

Adapted from: Kohatsu N, Robinson J, & Torner J. Evidence-based public health: an evolving concept. American Journal of Preventive Medicine, 2004, 27(5), 417-21.

Brownson R, Gurney J, & Land G. Evidence based decision making in public health. Journal of Public Health Management Practice, 1999, 5(5), 86-97.

Fugitive literature (also called gray literature)

Grey literature is that which is produced by government, academies, business, and industries, both in print and electronic formats, but which is not controlled by commercial publishing interests and where publishing is not the primary activity of the organization. Sources of fugitive literature include, but are not limited to, technical reports; conference papers and proceedings; theses and dissertations; business documents; newsletters, trade literature and house journals; government publications; working papers; white papers; and committee reports.

Adapted from: Aina LO. Grey literature and library and information studies (LIS): a global perspective. In: Fourth International Conference on Grey Literature, New frontiers in grey literature. Amsterdam: GreyNet, 2000:25–31.

Healthy People 2010

A set of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats.

Source: www.health.gov/healthypeople

Indicator

A specific, observable, and measurable characteristic or change that shows the progress a program is making toward achieving a specified outcome.

Source: MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. Introduction to program evaluation for comprehensive tobacco control programs. Atlanta (GA): Centers for Disease Control and Prevention; 2001. Available from http://www.cdc.gov/tobacco/evaluation_manual/Evaluation.pdf.

Inputs

The people, money, and information used to implement and run a program.

Source: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

Integration

The coordination of efforts across diseases and risk factors, levels of the socio-ecological model, partners, or interventions settings. The Institute of Medicine recommends the clustering or consolidation of categorical grants (i.e., integration across diseases and risk factors) for the purpose of increasing local flexibility to address priority health concerns and enhance the efficient use of limited resources.

Source: Institute of Medicine. The future of the public's health in the 21st century. The National Academies Press, 2002, p. 8. Available from: http://www.iom.edu/CMS/3793/4720/4304.aspx.

Intervention

Any kind of planned activity or group of activities (including programs, policies, and laws) designed to prevent disease or injury or promote health in a group of people.

Source: Zaza S, Bris PA, Harris KW (eds), Guide to community preventive services: what works to promote health. Task Force on Community Preventive Services. New York, NY: Oxford University Press, 2005.

Logic model

A systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve.

Source: W.K. Kellogg Foundation. Logic model development guide. Battle Creek, MI. January 2004. Available at http://www.wkkf.org/pubs/tools/evaluation/pub3669.pdf

Objectives

Statements describing the results to be achieved and the manner in which these results will be achieved.

Source: MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. Introduction to program evaluation for comprehensive tobacco control programs. Atlanta (GA): Centers for Disease Control and Prevention; 2001. Available from http://www.cdc.gov/tobacco/evaluation_manual/Evaluation.pdf.

Outcomes

The changes in a program's target population or in an environmental factor (e.g., local smoking laws or school curriculums) that are expected to result from a program's activities.

Source: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

Outputs

The direct products of program activities (e.g., a physical activity class for elderly people); immediate measures of what the program did.

Source: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

Performance measurement

The routine monitoring of program inputs, outputs, and short, intermediate and long-term outcomes.

Adapted from: Newcomer, K.E. 1997. Using Performance Measurement to Improve Programs. New Directions for Evaluation 75: 5-14.

Performance measures

A quantitative or qualitative characterization of a program's performance. Performance measures may characterize how a program was implemented, how products and services were delivered by a program to the target audience, or to what extent the program succeeded in achieving its objectives.

Source: U.S. Government Accountability Office. Performance measurement and evaluation. Definitions and relationships. GAO-05-739SP. May 2005.

Practice wisdom

The ability to base sound judgments on deep understandings in conditions of uncertainty. Within practice wisdom, practitioners produce and transform valuable and credible knowledge which is gained, in part, through practice experience.

Source: O'Sullivan T, Some theoretical propositions on the nature of practice wisdom. Journal of Social Work 5(2): 221-242, 2005.

Program Assessment Rating Tool (PART)

A questionnaire designed to help assess the management and performance of federal programs. It is used to evaluate a program's purpose, design, planning, management, results, and accountability to determine its overall effectiveness.

Source: U.S. Office of Management and Budget. The Program Assessment Rating Tool (PART). Available at: http://www.whitehouse.gov/omb/expectmore/part.html.

Program evaluation

The systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming.

Source: Patton MQ. Utilization-Focused Evaluation: The New Century Text, 3rd edition. Thousand Oaks, California: Sage, 1997.

Proxy

A measure used to approximate the exact measure desired when you cannot measure exactly what you want or need.

Source: http://patientsafetyed.duhs.duke.edu/module_a/measurement/proxy_measures.html

Reach

The proportion of intended target audience that participates in an intervention.

Source: Steckler A, Linnan L, editors. Process evaluation in public health interventions. San Francisco: Jossey-Bass; 2002.

Socio-ecological model

A model which identifies five levels of influence for health-related behaviors and conditions: individual, interpersonal, organizational, community, and public policy. This model is an example of an ecological perspective, which emphasizes the interaction between, and interdependence of, factors within and across all levels of a health problem.

Sources: McLeroy KR, Bigeau D, Steckler A, Glanz K, An ecological perspective on health promotion programs. Health Education Quarterly 15(4): 351-377, 1988; and National Cancer Institute, Theory at a glance: a guide for health promotion practice (2nd edition). U.S. Department of Health and Human Services, 2005.

Stakeholders

People or organizations that are invested in the program, are interested in the results of the evaluation, and/or have a stake in what will be done with the results of the evaluation.

Source: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

Surveillance

The ongoing, systematic collection, analysis, interpretation, and dissemination of data regarding a health-related event for use in public health action to reduce morbidity and mortality and to improve health.

Source: Centers for Disease Control and Prevention. Updated Guidelines for Evaluating Public Health Surveillance Systems. MMWR 2001; 50(RR13): 1-35. Available from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5013a1.htm.

Sustainability

The continuation of community health or quality of life benefits over time.

Source: Center for Civic Partnerships, Public Health Institute (2001). Sustainability Toolkit: 10 Steps to Maintaining Your Community Improvements. Oakland, CA: Public Health Institute.

Youth Risk Behavior Surveillance System (YRBSS)

National, state, and local school-based surveys of representative samples of 9th through 12th grade students conducted every two years. YRBSS data are used to monitor the prevalence of health risk behaviors that contribute to the leading causes of death, disability and social problems among youth and adults in the United States.

Source: http://www.cdc.gov/HealthyYouth/yrbs/index.htm

Appendix I

List of Acronyms

AHRQ	Agency for Healthcare Research and Quality. http://www.ahrq.gov/
ALA	American Lung Association http://www.lungusa.org
ATS	Adult Tobacco Survey. http://apps.nccd.cdc.gov/QIT/search_pages/survey_details_list.asp?surveyList=14
ATSDR	Agency for Toxic Substances and Disease Registry. www.atsdr.cdc.gov
BRFSS	Behavioral Risk Factor Surveillance System. http://www.cdc.gov/brfss/
BSB	Behavioral Surveillance Branch, Centers for Disease Control and Prevention. http://www.cdc.gov/brfss/index.htm
CDC	Centers for Disease Control and Prevention. www.cdc.gov
CMS	Centers for Medicare & Medicaid Services. http://www.cms.hhs.gov/
CPM	Core performance measures.
DACH	Division of Adult and Community Health, Centers for Disease Control and Prevention. http://www.cdc.gov/nccdphp/dach/
DASH	Division of Adolescent and School Health, Centers for Disease Control and Prevention. http://www.cdc.gov/HealthyYouth/about/index.htm
DDT	Division of Diabetes Translation, Centers for Disease Control and Prevention. http://www.cdc.gov/diabetes/about/index.htm
GAO	U.S. Government Accountability Office. http://www.gao.gov/
GPO	U.S. Government Printing Office. http://www.gpo.gov/
GPRA	Government Performance and Results Act. http://www.whitehouse.gov/omb/mgmt-gpra/index.html
HHS	U.S. Department of Health and Human Services. www.dhhs.gov
HP2010	Healthy People 2010. www.health.gov/healthypeople
IOM	Institute of Medicine. http://www.iom.edu/
MMWR	Morbidity and Mortality Weekly Report. www.cdc.gov/mmwr

NACCHO	National Association of County & City Health Officials. http://www.naccho.org/
NAEPP	National Asthma Education and Prevention Program. http://www.nhlbi.nih.gov/about/naepp/
NAHDO	National Association of Health Data Organizations. www.nahdo.org
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. http://www.cdc.gov/nccdphp/
NCEH	National Center for Environmental Health, Centers for Disease Control and Prevention. www.cdc.gov/nceh
NCHS	National Center for Health Statistics, Centers for Disease Control and Prevention. www.cdc.gov/nchs
NCI	National Cancer Institute. http://www.cancer.gov/
NHANES	National Health and Nutrition Examination Survey. www.cdc.gov/nchs/nhanes.htm
NHIS	National Health Interview Survey. http://www.cdc.gov/nchs/nhis.htm
NHLBI	National Heart, Lung, and Blood Institute. http://www.nhlbi.nih.gov/
NIH	National Institutes of Health. http://www.nih.gov/
NYTS	National Youth Tobacco Survey (2004). http://www.cdc.gov/tobacco/NYTS/nyts2004.htm
OMB	Office of Management and Budget. http://www.whitehouse.gov/omb/
OSH	Office on Smoking and Health, Centers for Disease Control and Prevention. http://www.cdc.gov/tobacco/
PART	Program Assessment Rating Tool http://www.whitehouse.gov/omb/part/
PGO	Procurement and Grants Office, Centers for Disease Control and Prevention. http://www.cdc.gov/about/funding.htm
SAMHSA	Substance Abuse & Mental Health Services Administration. http://www.samhsa.gov/
SPO	Steps Program Office, Division of Adult and Community Health, Centers for Disease Control and Prevention. http://www.cdc.gov/steps/
USDA	U.S. Department of Agriculture. http://www.usda.gov/
USPSTF	U.S. Preventive Services Task Force. http://www.ahrq.gov/clinic/uspstfix.htm

WHO World Health Organization. http://www.who.int/en/

YMCA Young Men's Christian Association. http://www.ymca.net/

YRBSS Youth Risk Behavior Surveillance System. http://www.cdc.gov/HealthyYouth/yrbs/index.htm

References

1. Hoffman C, Rice D, Sung HY. Persons with chronic conditions: their prevalence and costs. JAMA. 1996;276:1473-9.

2. CDC. *The burden of chronic diseases and their risk factors: national and state perspectives 2004*. Atlanta, GA: HHS, CDC; 2004. Available at: http://www.cdc.gov/nccdphp/burdenbook2004

3. Flegal KM, Graubard BI, Williamson DF, Gail MH. Excess deaths associated with underweight, overweight, and obesity. *JAMA.* 2005;293:1861-1867.

4. Colditz GA. Economic costs of obesity and inactivity. *Medicine & Science in Sports & Exercise.* 1999;31:S663-S667.

5. CDC. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005.* Atlanta, GA: HHS, CDC; 2005. Available at: http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2005.pdf

6. ALA. *Trends in asthma morbidity and mortality 2005* [online]. 2005. Available at: http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=33347

7. Pratt M, Macera CA, Wang G. Higher direct medical costs associated with physical inactivity. *The Physician and Sports Medicine*. 2000;28(10). Available at: http://www.physsportsmed.com/issues/2000/10_00/pratt.htm

8. CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs – U.S., 1995-1999. *MMWR*. 2002;51(14):300-3. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5114a2.htm#top

9. IOM. *The future of the public's health in the 21st century*. Washington, DC: The National Academies Press; 2003. Available at: http://www.iom.edu/CMS/3793/4720/4304.aspx

10. Program Announcement 03135: Steps to a HealthierUS: a community-focused initiative to reduce the burden of asthma, diabetes, and obesity. Fed Regist 2003 May 20; 68(90):25035-47. Available at: http://a257.g.akamaitech.net/7/257/2422/14mar20010800/edocket.access.gpo.gov/2003/03-10986.htm

11. Program Announcement 04234: Steps to a HealthierUS: a community-focused initiative to reduce the burden of asthma, diabetes, and obesity. Fed Regist 2004 May 7; 69(89):25801-16. Available at: http://www.healthierus.gov/steps/rfa/May2004RFA.htm

12. Program Announcement 04134: Steps to a HealthierUS: national organization partnerships. Fed Regist 2004 April 23; 69(79):22055-60. Available at: http://www.healthierus.gov/steps/rfa/2004OrgsRFA/FR04232004.htm

13. W. K. Kellogg Foundation (U.S.). Logic model development guide. Battle Creek (MI): W. K. Kellogg Foundation; 2001.

14. National Cancer Institute (NCI). Theory at a glance: a guide for health promotion practice (2nd edition). U.S. Department of Health and Human Services, 2005. Available at https://cissecure.nci.nih.gov/ncipubs/details.asp?pid=1302.

15. McLeroy KR, Bigeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. Health Education Quarterly 15(4): 351-377, 1988.

16. National Public Health Partnership (NPHP). Integrated Public Health Practice: Supporting and Strengthening Local Action. 2001. Available at: http://www.nphp.gov.au/publications/strategies/integpg-discuss.pdf

17. U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2005.

18. Patton MQ. Utilization-focused evaluation: the new century text, 3rd edition. Thousand Oaks (CA): SAGE Publications; 1997.

19. GAO. *Performance measurement and evaluation: definitions and relationships.* (Publication Number GAO-05-739SP). Washington, D.C.: Government Accountability Office; 2005. Available at: http://www.gao.gov/new.items/d05739sp.pdf

20. Centers for Disease Control and Prevention. Framework for program evaluation in public health practice. MMWR 1999;48(No. RR-11):1–40. Available from: URL: http://www.cdc.gov/eval/framework.htm.

21. Newcomer, K.E. Using performance measurement to improve programs. *New Directions for Evaluation.* 1997;(75): 5-14.

22. National Performance Review. *Serving the American public: best practices in performance measurement: benchmarking study report* [online]. 1997. Available at: http://govinfo.library.unt.edu/npr/library/papers/benchmrk/nprbook.html

23. Clinton, WJ. Remarks on signing the Government Performance and Results Act of 1993 and an exchange with reporters. *Weekly Compilation of Presidential Documents: 1993.* Government Printing Office [online]. Available at: http://frwebgate2.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=64467561403+0+0+0&WAISaction=retrieve

24. HHS. *Assisting performance measurement initiatives in health and human services programs: community level indicators* [online]. 1998. http://aspe.os.dhhs.gov/progsys/perfmeas/

25. CDC. *Vision, Mission, Core Values, and Pledge* [online]. 2006. Available at: http://www.cdc.gov/about/mission.htm

26. One Hundred Third Congress of the United States of America. *Government performance and results act of 1993* [online]. 1993. Available at: http://govinfo.library.unt.edu/npr/library/misc/s20.html

27. MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. *Introduction to program evaluation for comprehensive tobacco control programs.* Atlanta, GA: CDC; 2001. Available at http://www.cdc.gov/tobacco/evaluation_manual/Evaluation.pdf

28. IOM. *Improving health in the community: a role for performance monitoring*. Washington, DC: The National Academies Press; 1997. Available at: http://www.nap.edu/catalog/5298.html

29. Steckler A, Linnan L, eds. *Process evaluation in public health interventions.* San Francisco: Jossey-Bass; 2002.

30. Zaza S, Bris PA, Harris KW (eds). Guide to community preventive services: what works to promote health. Task Force on Community Preventive Services. New York, NY: Oxford University Press; 2005.

31. HHS. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office; November 2000. Available at: http://www.healthypeople.gov/Document/tableofcontents.htm#under

32. CDC. *Introduction to program evaluation for public health programs: a self-study guide.* Atlanta, GA: HHS, CDC Office of the Director, Office of Strategy and Innovation; 2005.

33. Mish F (ed.). *Merriam-Webster's Collegiate Dictionary.* Springfield, MA: Merriam-Webster, Inc.; 1994.

34. Perrin E & Koshel J (eds.). *Assessment of performance measures for public health, substance abuse, and mental health.* Panel on Performance Measures and Data for Public Health Performance Partnership Grants, National Research Council. Washington, DC: National Academy Press; 1997.

35. Mercer S, MacDonald G, & Green L. Participatory research and evaluation: from best practices for all states to achievable practices within each state in the context of the Master Settlement Agreement. *Health Promotion Practice.* 2004;5(3):167S-178S.

36. Joint Committee on Standards for Educational Evaluation. *The program evaluation standards, 2nd ed*. Thousand Oaks, CA: SAGE Publications; 1994.

37. OMB. *Program assessment rating tool (PART)* [online]. 2006. Available at http://www.whitehouse.gov/omb/part/

38. CDC. Indicators for chronic disease surveillance. *MMWR.* 2004;53(RR11):1-6. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5311a1.htm

39. CDC. Updated guidelines for evaluating public health surveillance systems. *MMWR.* 2001;50(RR13):1-35. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5013a1.htm

40. CDC. *Behavioral Risk Factor Surveillance System (BRFSS)* [online]. 2006. Available at: http://www.cdc.gov/brfss/index.htm

41. CDC. *YRBSS: Youth Risk Behavior Surveillance System* [online]. 2006. Available at: http://www.cdc.gov/HealthyYouth/yrbs/index.htm

42. USAID. Guidelines for indicator and data quality. *Performance Monitoring and Evaluation TIPS.* 1998; 12:1-12. Available at: http://pdf.usaid.gov/pdf_docs/PNACA927.pdf

43. Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. *Key outcome indicators for evaluating comprehensive tobacco control programs.* Atlanta, GA: CDC; 2005.

44. USPSTF. *Guide to Clinical Preventive Services, 2005*. (Publication No. AHRQ 05-0570). Rockville, MD: Agency for Healthcare Research and Quality; 2005. Available at: http://www.ahrq.gov/clinic/pocketgd.htm